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ABSTRACT

The dissertation examines the relationship among aspects of the individualized education program (IEP) elements: what the contract states, what the teacher intends, and what the child experiences. An initial chapter focuses on the socio-political context of the IEP, noting the lack of research on how the IEP is implemented in the classroom. Chapter 2 presents an alternative conceptualization of individualization which emphasizes the previously neglected interrelationships of teachers and students. In chapter 3, the research plan is detailed, including a rationale for selection of a naturalistic methodology. Separate chapters focus upon data collection, analysis, and results for the contractual plan, the phenomenological plan, and the empirical plan. Findings are interpreted to demonstrate the comprehensive nature of IEPs and the interaction of written plan, teacher intent, and child behavior. Twelve appendixes include examples of IEPs designed for the preschool student in the study, a subject appropriateness scale, criteria for external review of IEPs, sample letters of consent, the contractual and phenomenological plans, and rules for matching agendas to objectives. (CL)

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INDIVIDUALIZED EDUCATION PROGRAMS: A NATURALISTIC STUDY OF THE MATCH BETWEEN INTENT AND PRACTICE

by

Victoria C. Pappas

Final Report

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INDIVIDUALIZED EDUCATION PROGRAMS:

A NATURALISTIC STUDY OF THE MATCH BETWEEN INTENT AND PRACTICE

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Abstract

Since the passage of the Education for All Handicapped Children Act of 1975 (Public Law 94-142) each child receiving special education services is mandated to have an individualized education program (IEP). Despite a series of implementation studies, very little is currently known about what happens in the classroom subsequent to the completion of an IEP. A parallel situation exists in the more general area of individualized instruction: attempts to evaluate the impact of individualization have been diffuse; few have moved beyond description of a particular approach in order to assess qualitative effects of programs and practices upon children or the degree to which individualization was occurring. Very little research exists on the utilization of individualized plans by teachers and their relation to student outcomes. It was the purpose of this study to examine what constitutes a child's "individualized" program, using the IEP as a case in point and employing naturalistic methods to measure it, so that both educational ideology and public policy might be more adequately informed.

A proposition for a triangulated study of the phenomenon of individualization was put forth, and the study was conceptualized as the

investigation of the relationships among three components of individualization: the contractual (or written) plan, the phenomenological plan (or the program as intended by the teacher) and the empirical plan (or the program as experienced by the child). The objective of the study was to document the extent of match between intent (contractual and phenomenological plans) and practice (empirical plan). This was accomplished through a naturalistic case study of a teacher and a five-year old child in a public school preschool program for handicapped children.

Mixed, multiple strategies for data collection and analysis were utilized to portray the characteristics of each of the three components of individualization. The data archives included documents, field notes, transcripts of teacher interviews, and a videoscript (a specialized format designed to highlight videotape transcripts, setting descriptions, and teacher retrospections of the child in situ). Strategies from content analysis, ethnography, and ecological psychology were used to unitize and categorize the various data forms so that comparisons across plans and reality could be made. A model for consideration of the process of individualization emerged.

The results illustrated how individualization is more than just written plan. Although congruence across written plan, teacher intent, and the child's program-as-experienced was found, the data also indicated how teacher values and professional perspectives mediated the contractual IEP; they also evidenced the proactive behavior of the child in influencing program content and direction. The study not only raised implications for teacher practice and the formulation of education policies, but also highlighted issues in the application of naturalistic research methods to the study of classroom teaching/learning settings.

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To Mike, whom this reflects
as much as it does me.

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CHAPTER I

SOCIO-POLITICAL AND EDUCATIONAL CONTEXT

In November of 1975, the United States Congress enacted legislation which had significant impact upon the public schools of this country. The Education for All Handicapped Children Act (Public Law 94-142) was the federal legislative response to events and concerns that had arisen as a result of litigation, parent activism, state legislative activities, and the posture of the special education community regarding the proper support of education for handicapped children. While recognizing the constitutional authority of the states to govern education, the federal government provided additional redress to handicapped school-aged children and their parents by mandating in the Act that they all "have available to them . . . a free appropriate public education" no later than September 1, 1978 (Section 601 (c)). In effect, this implementing legislation confirmed for handicapped children what the courts had earlier declared in the Brown decision of 1954 and in the landmark civil rights cases of the early 1970s: that all children were entitled to the opportunity of a public education, and that handicap, as race, could no longer be a reason for exclusion from or differences in public educational services.

Federal monies were committed to state and local education agencies, and administrative and evaluative mechanisms were instituted to assist, influence, even coerce, the states into implementing the provisions of the law. Unusually quick implementation efforts followed, albeit not without stress and strain; in fact, many states instituted full services even before the mandatory startup date (U.S. Department of Health, Education and Welfare, Office of Education, 1978a). Within two years, about 259,000 more handicapped children were receiving special education and related services, and the number of children served under Public Law 94-142 surpassed 3.8 million (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1980b).

Not only did Public Law 94-142 commit the states to support the education of handicapped children with public funds, at no cost to parents (Section 4 (a) (18)), it also gave authority to particular ways in which that education was to be delivered. It legitimized parents as active decision-makers in the development and evaluation of their children's programs (Section 4 (a) (19)) and guaranteed avenues of due process to them (Section 615). More germane to this discussion, the legislation also defined the education of handicapped children as special, to include "specially designed instruction . . . to meet the needs of a handicapped child" (Section 4 (a) (16)). Further, the provisions stipulated that this special education was to be conducted in conformance with an individualized education program (Section 4 (a) (18)). These two notions, that of specially designed instruction and the individualized education program (IEP) in particular, are the substance of this study.

The inclusion of the concept of an individualized education program into Public Law 94-142 was significant in that an educational ideology (i.e., individualized instruction) became a matter of public policy. This phenomenon, however, did not develop in isolated fashion in the halls of Congress; it emerged from a nationwide climate that had become increasingly concerned and active regarding the exclusion and inappropriate education of handicapped children. The legislation was a reflection of what had already occurred in various arenas: state government, other federal agencies, the special education community, an active parent movement, and especially the courts. A description of their influence upon Public Law 94-142 has been detailed elsewhere (Pappas, Note 1). This discussion will review the intent of Congress and the courts in order to illustrate the support they provided towards legitimizing individual programming as public policy. It will also highlight the educational context from which the conceptualization of an individual plan emerged.

The Role of the Courts

The courts proved to be one of the strongest influences for change in education, as parents of handicapped children turned to them for solutions to their discontent over the lack of educational opportunity available to their offspring. For many handicapped children in this country, education had been neither free, appropriate, nor in many cases even existent prior to 1975. Although most state laws affirmed a state's right and obligation to provide all children with an education, handicapped children were generally excluded through the use of provisions in compulsory attendance laws which exempted them as being unable to profit from schooling (Weintraub & Abeson, 1976). Even as late as 1960, 19 states had such exclusionary provisions (Zigler et al, Note 2).

Practices such as these reflected public values which held that handicapped individuals were dangerous, nuisances, and/or burdens, and that appropriate "treatment" consisted of isolation from the mainstream of society. Attitudes existed which held that such children were not the responsibility of the public schools, that they could not learn, and that efforts to educate them were a waste of resources more appropriately allocated to those who might profit from instruction (National Association of Retarded Citizens, 1977; Sontag, 1976). However, these beliefs and concomitant practices were shaken in 1954 by the Supreme Court. In its decision in Brown v. Topeka Kansas Board of Education (1954), the Court ruled that statutes such as those just described were inconsistent with the 14th Amendment, which guarantees rights of equal protection and due process. Although the specific complaint concerned racial discrimination, the Brown case has been credited with establishing the rights of all citizens to an equal education (National Association of Retarded Citizens, 1977).

During the late 60s and early 70s, the courts continued to play a major role in redirecting public policies regarding the equal treatment of handicapped children in the public schools. By the time of the introduction of the Senate bill which culminated in Public Law 94-142, 46 court cases regarding education for handicapped children had been decided or were pending in 28 of the states (U.S. Congress, House of Representatives, 1975).

During the 92nd Congress, one case in particular had a profound impact. In 1971, parents of 13 mentally retarded children in Pennsylvania sued the state for failing to provide their children and others with a publicly-supported education; they cited their situation as a violation of the 14th Amendment. This class action suit resulted in a consent decree which gave mentally retarded children the right to an education in Pennsylvania (PARC v. the Commonwealth of

Pennsylvania, 1971). This decision was affirmed and extended in a later 1971 case, which held that all children, handicapped or not, were entitled to publicly-supported education, and that lack of funds was insufficient reason for their exclusion (Mills v. the Board of Education of the District of Columbia, 1972). Thus, by the time the House and Senate bills regarding education for handicapped children were introduced in the U.S. Congress in 1973, conclusions from the judicial branch of government were clearly evident: 1) that education was vital; 2) that handicapped children could be educated; and 3) that the public schools were responsible for their education (President's Committee on Mental Retardation, 1975).

Not only had the courts applied the concept of equal protection to education, but they also began to lay some groundwork for the support of individualized programming for handicapped children. Both the PARC agreement and the Mills decision referred to the obligation of states to provide an "appropriate" (PARC) or "suitable" (Mills) education for children with handicaps. Although none of the courts defined these terms, they did discuss special educational opportunities that should be made available to handicapped children (Turnbull & Turnbull, 1978).

Other court cases in the 70s also supported that theme, especially litigation which dealt with misclassification and subsequent inappropriate placement of children. Another landmark case resulted in standards for nondiscriminatory testing and due process procedures to ameliorate practices of mislabeling (Diana v. the State Board of Education of California, 1970). This case especially influenced Congress to develop policy which assured that individual needs rather than categorization would be the basis of placement and programming decisions.

In 1972, another case was even more explicit. In addressing the right to treatment of mentally retarded residents of a state institution, the court promulgated and ordered implemented the Minimal Constitutional Standards for Adequate Habilitation of the Mentally Retarded (Wyatt v. Stickney, 1972). In these Standards, the right of the residents to habilitation (which included education) suited to their needs was stipulated, and in a certain way: each resident, within 14 days after admission to an institution, was to have an individual habilitation plan in place. The judge's specification of the components of that plan were similar to what later emerged in the provisions of Public Law 94-142.

The events in the courts, then, reflected national concern over the status of handicapped children, and provided legal solutions towards ameliorating the inappropriate conditions that existed. These solutions legitimized the provision of services to handicapped children, as well as the utilization of individualized programming for them. This benchmark litigation did not go unnoticed in Congress, and provided a significant context which shaped legislative processes there. Congress moved to develop an implementation mechanism to direct the transformation of judicial intent to practice.

Congressional Background

Although there had been a long history of federal legislation for handicapped persons prior to 1970, the most direct legislative precursors of Public Law 94-142 can be found in the amendments regarding handicapped children in the Elementary and Secondary Education Act (ESEA) of 1965. First mention of education for the handicapped occurred in the amendments to ESEA, Title I, where federal assistance was authorized for the education of children in state-operated and state-supported schools (Public Law 89-313, 1965). Subsequent amendments to ESEA, Title VI led to increases in federal funds to states for the expansion of special education services (Public Law 89-750, 1966), and finally to the repeal of Title VI for the sake of creating a separate act dealing solely with the education of the handicapped (Public Law 91-230, 1970).

During the 93rd Congress, both the House and Senate took action on other bills designed to amend and reauthorize Public Law 91-230. In August of 1974, Title VI-B was passed, which extended Public Law 91-230 for three additional years and affirmed the right of handicapped children to an education (Public Law 93-380, 1974). Public Law 93-380 also carried a strong recommendation for individualized planning:

> It is the intent of Congress to encourage, where feasible, the development for each educationally deprived child participating in a program under this title of an individualized written educational plan (maintained and periodically evaluated), agreed upon jointly by the local education agency, a parent or guardian of the child, and when appropriate, the child (Title I, Section 141 (b)).

Several other bills under consideration at the same time contained even more specific provisions for an IEP. In January of 1973, Senator Harrison Williams (Democrat, New Jersey), chairperson of the Senate Committee on Labor and Public Welfare, along with a host of other co-sponsors, had introduced S6 to provide financial assistance to the states for improved special education services (U.S. Congress, Senate, 1973). The bill contained essentially the same provisions describing IEPs that later were to appear in Public Law 94-142.

Similar activity had also occurred on the House side. Representative Albert Quie (Republican, Minnesota), acting on a legislative memorandum from minority legislative associate Martin LaVor (Note 3), introduced the first House version of legislation describing an IEP in detail (U.S. Congress, House of Representatives, 1973). Quie's description of the written individualized educational plan was very close to what Williams was concurrently proposing in S6.

In addition, the concept of individualized plans was cropping up in the other-than-education legislation. During both the 93rd and 94th Congresses prior to the passage of Public Law 94-142, legislators (and the same committees) were formulating amendments to bills geared toward other handicapped constituencies, particularly the Vocational Rehabilitation Act and the Developmental Disabilities Services and Construction Act. At the time, there was considerable concern in the rehabilitation sector that too much control of a disabled person's life rested in the hands of the vocational rehabilitation counselor (Walker, Note 4). As a result, the concept of an individual plan appeared in the Vocational Rehabilitation Act Amendments of 1973 (Public Law 93-112, 1973). Likewise, the Developmentally Disabled Assistance and Bill of Rights Act (Public Law 94-103, 1975) became law in October of 1975, and contained provisions requiring individual habilitation plans. In both of these pieces of legislation, the provisions for individual plans paralleled what was to emerge in the education bill later in 1975.

As the 94th Congress began action in the House and Senate to amend ESEA, Title VI-B (Public Law 93-380) to make its authorization permanent, both the Quie and Williams bills, which had been introduced in the previous Congress, were passed by overwhelming majorities (U.S. Congress, Senate, 1975). They included similar provisions outlining the development and use of individual plans. These provisions legitimized the concept of the IEP as the vehicle for planning and delivering "specially designed instruction . . . to meet the needs of a handicapped child."

One such provision gave an explicit meaning to the IEP: it was to be a "written statement for each handicapped child," including the following components:

> a. a statement of present levels of educational performance of such child;
>
> b. a statement of annual goals, including short-term instructional objectives;
>
> c. a statement of the special educational services to be provided such child, and the extent to which such child will be able to participate in regular education programs;
>
> d. the projected date for initiation and anticipated duration of such services; and
>
> e. appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether instructional objectives are being achieved (Section 74 (a) (19)).

In addition to the denotative meaning of the IEP, two other provisions extended its meaning of the IEP in a connotative sense, associating the IEP with other concepts. For instance, the IEP was established as at least one of the measures of a "free appropriate public education" in Section 4 (c) (18):

> The term 'free appropriate public education' means special education and related services which:
>
> a. have been provided at public expense under public supervision and direction, and without charge;
>
> b. meet the standards of the State educational agency;
>
> c. include an appropriate preschool elementary, or secondary school education in the State involved; and
>
> d. are provided in conformity with an individualized education program.

Another provision shed light not so much on the form of the IEP, but the process by which it was to be formulated. The IEP was to be "developed in any meeting" where the following types of people were present:

> a. a representative of the local education agency or an intermediate educational unit who shall be qualified to provide, or supervise the provision of, specially designed instruction to meet the needs of handicapped children;
>
> b. the teacher;
>
> c. the parents or guardians of such child; and
>
> d. whenever appropriate, such child (Section 4 (c) (19)).

Thus, the Congress set in motion a policy that established the IEP as a document which reflected "specially designed instruction," developed through a process of parental-professional collaboration, and which would meet at least one of the criteria for an "appropriate" education for children with handicaps. The minor differences in the House and Senate bills were reconciled in conference sessions, and then approved in both Houses with a broad-based coalition and non-partisan support. President Gerald Ford signed the legislation into law as the Education for All Handicapped Children Act of 1975 (Public Law 94-142) on November 29th. The process of implementation was set in motion and full compliance by the states was expected by September 1, 1978.

Legislative Intent

As cited previously, the language of the law indicated that Congress was concerned with improving the quality of education for handicapped children as well as with assuring them access to public and special educational services. Given some evidence of what Congressional sponsors of the legislation valued and the specificity of the IEP provisions in the law, it might be expected that legislative intent and subsequent implementation procedures would have been clear. However, because the legislative process was a political one which reflected the agendas of and compromises among many parties, the intents behind the law were multiple. Subsequent implementation and evaluation have borne the consequences of that reality.

Clearly, the intent of individualization was a central one. The legislation's definitions and other statements of purpose showed that improved services and appropriate education included individualized programming. In its preamble to the Act, Congress affirmed the right of handicapped children to a special education, "designed to meet their unique needs" (Section 3 (c)). Furthermore, the definition of an "appropriate" education was linked to the development of an individualized plan for each child (Section 4 (c) (18)).

Numerous citations in the Congressional commentaries of the deliberations and hearings that were held with regard to the Act support this intent. During the Senate debates, Senator Jennings Randolph (Democrat, West Virginia), chairperson of the Subcommittee on the Handicapped and one of the original sponsors of S6, made the following statement:

> A feature of the measure that will promote the educational development of handicapped children is the individualized planning conference. It has long been recognized by educators that individualized attention to a child brings rich rewards to the child . . . We will promote the educational development of handicapped children through the processes of individualized planning conferences (National Advisory Committee on the Handicapped, 1977, pp. 25-26).

Senator Walter Mondale (Democrat, Minnesota), another committee member and co-sponsor, added:

> In the past, many children have simply been placed in institutions or segregated in schools and classrooms with little emphasis on adequate education and training. Under S6, an individual planning conference will provide a tailored program for each handicapped youngster to meet his special educational needs. (National Advisory Committee on the Handicapped, 1977, p. 30).

Similar statements can be identified in House Report 94-332 (U.S. Congress, House of Representatives, 1975), where acknowledgement of the growing trend towards individualization of instruction was cited as the reason for including the provision for IEPs. The intent to improve and individualize instruction was included in the final version of the House bill, and during its debate, Representative John Brademas (D, Indiana) made the following point:

> Individualized plans are of great importance in the education of handicapped children in order to help

> them develop their full potential. (National Advisory Committee on the Handicapped, 1977, p. 31).

But individualization was not the only intent of Congress. An official Congressional report classified its intents into three broad categories: improved educational instruction, parental involvement, and accountability for the provision of services (U.S. Congress, House of Representatives, 1975). The following statements elaborated these three fundamental tenets of the IEP:

> 1. Each child requires an educational plan that is tailored to achieve his or her maximum potential.
>
> 2. All principals in the child's educational environment, including the child, should have the opportunity for input in the development of an individualized program of instruction.
>
> 3. Individualization means specifics and timetables for those specifics, and the need for periodic review of those specifics --- all of which produce greatly enhanced fiscal and educational accountability. (p. 13)

So rather than articulating a single, consistent statement of intent, the sources illustrate that "intent" was, in fact, multifarious. This factor created some of the more nettlesome problems in implementing the concept of an IEP. While the detail of the definitions and provisions of the law added specificity to the concept, they also, by their nature, created ambiguity in implementation, and left room for multiple interpretations.

The provisions which specified the required elements of IEPs spawned a host of implementation questions regarding the nature and specificity of the components and the provisions of regular education services. Concerns were also raised regarding the schools' accountability for specific outcomes, evaluation criteria, and timelines. Furthermore, by linking the definition of the IEP to an appropriate education, questions of liability were heightened. Despite attempts to clarify that the IEP was not a contract (U.S. Congress, Senate, 1975; U.S. Department of Health, Education and Welfare, Office of Education, 1977, Section 121(a) (349)) and that schools were responsible only for the provision of services rather than learner outcomes (U.S. Congress, House of Representatives, 1977), concerns over legal responsibility for child change remained and have yet to be reconciled.

While the intended purpose(s) of the IEP remain ambiguous, practice has made explicit a variety of uses. IEPs serve adminstrative and management functions such as auditing, budgeting, and general record-keeping; they also serve as key documents for state and federal level reviews of compliance (Marver, Note 5). Another function of the IEP has been to involve parents in the planning process; the IEP process's integral link to the required due process provisions of the law has nudged school districts to afford parents more participation and control of their children's education (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1980b). Very few reflect the process of individualization, for which Public Law 94-142 was the implementation mechanism.

More recent policy clarifications have downplayed the relationship of the IEP to classroom instruction. An Office of Special Education policy paper listed six functions of the IEP, only the last making reference to the classroom program and then only in an evaluative sense (U.S. Department of Education, Office of Special Education and Rehabilitation Services, 1980a). Primarily, the policy paper described the purposes of the IEP as a document which 1) serves as a vehicle to foster communication with parents; 2) serves as a focal point in the resolution of differences between them and the school; 3) sets forth a commitment of resources; 4) serves as a management tool to assure appropriate services are provided; 5) serves as a compliance/monitoring document to assure the child is receiving a free appropriate education as agreed upon; and 6) serves as an evaluation device to determine the extent of the child's progress towards the projected outcomes. These recent rules resulted in a compliance process which was measurable, but not related to the purpose of the law, that of quality programming.

Thus, a gap remains. What constitutes an "appropriate education" and "specially designed instruction" continues to be an enigma. Clearly the IEP is involved, but whether it is simply at the level of agreement to provide services or to assure due process, or at the more substantive level of influencing the instructional program in the classroom remains problematic. Legislative and regulatory policies have specified and clarified the inputs to the development of IEP and have chosen to consider outputs in terms of procedures and provision of services. Implementation strategies and evaluation studies have been curiously hesitant to consider what happens to the child's program once the IEP has been approved. Two final quotations summarize the dilemma that supports the need for further study into this area:

> The law does not contain explicit requirements for the use of IEPs nor does it call for 'individual instruction' per se --- but the implicit rationale for the IEP requirement is the assumption that the best way to ensure that a child's program is appropriate is to construct an individual program based on his or her unique instructional needs . . . The

> question arises, however, whether and how the document is used in the instructional process . . . (Marver, pp. 1-2, Note 6)
>
> . . . when the IEP is not used on a continuous, systematic basis for instructional planning, the spirit of Public Law 94-142 has been ignored. (Morgan, 1981, p. 5)

Studies of Implementation Effects

Another provision of Public Law 94-142 instructed the Commissioner of Education to report annually to Congress the findings of an evaluation of the implementation of the Act (Section 618). Since then, the Bureau of Education for the Handicapped (BEH), and now the Office of Special Education Programs in the Department of Education has supported a program of evaluation studies and field-initiated research. The bulk of the findings regarding the evaluation of the IEP provisions has emanated from this. However, their funding patterns have yet to reflect concern over the instructional impact of the IEP.

In 1975, BEH developed an evaluation plan which focused upon six questions designed to provide information on the implementation effects of Public Law 94-142. These questions have guided subsequent special studies funding, and included:

1. Are the intended beneficiaries being served?
2. In what settings are beneficiaries being served?
3. What services are being provided to beneficiaries?
4. What are the consequences of implementing the Act?
5. What administrative procedures are in place?
6. To what extent is the intent of the Act being met? (U.S. Department of Health, Education and Welfare, Office of Education, 1978, p. 61)

The studies which were commissioned to research questions four and six are of specific relevance to the thesis presented in this paper.

The investigations into those two questions may be categorized into three levels of inquiry: existence, scope, and substantive effects. At the existence level, studies which indicated the extent to which IEPs were in place and described the characteristics of the document were reviewed. Both Pyecha (1979) and Marver and David (1978) reported on the properties of IEPs, particularly with respect to compliance with the mandated components, descriptions of formats, and interrelationships of the content. Further, Annual Reports to Congress from the Office of Special Education reported the extent to which IEPs are in place for children in special education from data supplied by state education agencies (U.S. Department of Health, Education and Welfare, Office of Education, 1978, 1979; U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1980b).

The majority of studies regarding IEP implementation were conducted at the level of scope, and dealt with a variety of implementation issues. Many documented the effects on teachers, especially with respect to their attitudes and satisfaction with the process, demands on their time, and their new roles and interstaff relationships (Blaschke, 1979; Engler et al, 1978; Lewis, 1977; Marver & David 1978; National Education Association, 1978; Norton, 1977; Penney, 1977; Safer et al, 1978; Sagstetter, 1977; Stearns et al, 1978; and U.S. Department of Health, Education and Welfare, Office of Education, 1979). Davis (in Safer et al, 1978) and Price and Goodman (1980) calculated time and cost effects of IEP development. A series of related studies described various aspects of group decision-making processes in IEP development (Fenton et al, 1978b; Semmel et al, 1978; and Yoshida et al, 1977, 1978). Still others examined parental effects, including attitudes about and satisfaction with their new, active roles in determining their children's programs (Budoff, 1976; Lewis 1977; Marver & David, 1978; Salett, Note 7; Sagstetter, 1977; Stearns, 1978; and Yoshida, 1978). Finally, a group of studies was focused upon changes in administrative arrangements and practices resulting from the IEP mandate (Blaschke, 1979; Engler et al, 1978; National Education Association, 1978; Safer et al, 1978; and Stearns et al, 1978).

In contrast to this wealth of effort at the scope level, very little work has directly contributed findings at the substantive level, virtually none regarding the impact of the development of IEPs on either instructional programs or child outcomes. Impact studies more recently funded by the Department of Education have emphasized consequences to families (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1980b). Peripheral findings in some of the foregoing studies of scope, however, spur further thought in this area.

Interview data from the studies which assessed the effects of IEP implementation on teachers indicated a general dissatisfaction with the process, primarily because it was time-consuming, focused on compliance and paperwork, and (most crucial here) lacked utility in the classroom (Lewis, 1977; Marver & David, 1978; Norton, 1977; Penney, 1977; Safer et al, 1978; and Sagstetter, 1977). In fact, many teachers perceived the IEP process to detract from their instructional time and role.

It is significant, however, that Safer et al (1978) differentiated a cohort of teachers in their study who were satisfied with the IEP concept. These teachers spoke strongly of the value the IEP played in their instructional planning; despite high demands on their time, they believed the IEP provided direction, saved time, indicated growth or lack of growth, and motivated children. This group of teachers considered the IEP process an integral part of their instuctional role. There was, however, no in-depth followup to determine how these teachers used the IEP or how their instructional style may have been influenced.

In other studies, discontent surfaced about IEPs when the intent of the Act was interpreted as a means to improve instruction while implementation focused upon procedural matters (Penney, 1977; Sagstetter, 1977); Norton (1977) also reported that in school districts where the IEP process and documentation had both administrative and instructional utility, negative responses diminished. Dissatisfaction with increased time demands resulting from the IEP process proved most pervasive when teachers saw the process as separate from their instructional activities.

More recent results indicate that teacher attitudes concerning the IEP have been positive; for example, Blaschke (1979) reported far fewer teachers in rural areas question the instructional validity and utility of IEPs than he found during the 1977-1978 school year. Likewise, a compilation of the inservice training topics across the country indicates that IEPs and instructional procedures were high priorities for teachers (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1980b).

To date, only one investigator has focused directly upon the relationship between the IEP and the teacher who would use it. During the 1977-78 school year, Marver (Note 8) interviewed 122 teachers regarding their use of IEP in the classroom. These teachers came from school districts which were experienced with IEP or IEP-like regulations. Thirty-eight percent of the teachers reported they regularly referred to IEPs. They used them to formalize their intentions, facilitate construction of lesson plans, guide planning and record-keeping, and chronicle progress. The most frequently used components of the IEP were its goals, objectives, and current level of functioning. Another 45% of the teachers found the IEP process useful in setting a direction for the year and providing a framework for working with a particular child. While many of these respondents read the IEPs only at the beginning of the school year, they reported they had "internalized" the content and/or what they had learned about the child during referral, assessment, and the IEP meeting process. Only 12% of those Marver interviewed reported they did not use the IEP at all.

Marver also found that utilization of IEPs in the classroom correlated with writing the IEP and participating in the overall process. He, like Safer and her associates, identified key factors conducive to utilization of IEPs: an individualized and data-based teaching approach; preservice training in individualization and the use of objectives; inservice training regarding IEPs and Public Law

94-142; data banks and data management systems; and the use of support personnel such as aides and specialists. Unfortunately, while these investigators initiated much-needed pursuit of an under-represented area of inquiry, none moved further to provide information regarding how the IEP was implemented in the classroom.

Individualization and the Schools

It would be a disservice to suggest that individualization emerged solely from legislative/judicial conceptualizations, when in fact there had been a long history of professional acknowledgement of the value of individualized instruction. Opinions of the courts and legislative proposals rested on theories and practices that had been employed in the educational community since the late 19th century.

Gibbons (1971) cited correspondence courses as one of the earliest efforts to individualize instruction, available as early as 1873. He traced the beginnings of self-paced unit plans to the Pueblo Plan, developed in 1888 to permit students to pace their own progress through a course rather than awaiting their turns in daily recitations. The Association for Supervision and Curriculum Development credited the beginnings of individualization as an outgrowth of the intelligence testing movement, citing as seminal the psychologist Terman's suggestion in 1916 that there needed to be differentiated courses of study to accommodate variance in pupils' rates of learning (Doll, 1964). Then, in the 1920s, educators espoused the modification of content and timing in curricula to account for individual differences (Bobbitt, 1924). The Progressive Movement, spearheaded by John Dewey's conception of experience as learning and his ideal of nurturing individuality, spawned a host of curriculum reforms and implementation programs (Biber, 1972). A National Survey of Secondary Education conducted in the 1930s illustrated that individual differences were most commonly provided for by homogeneous grouping practices, special classes, unit assignments, and the problem/project methods of the Morrison, Dalton, and Winnetka Plans (Doll, 1964). A rudimentary concept of an individual education plan even appeared. Mort (1929) devised the Individual Pupil Program Card, whose purpose it was to bring together information bearing upon an individual student's needs so that appropriate adjustments could be made to his/her program.

The 1960s saw a resurgence of approaches to individualized programming. Pressures for change emanated from a variety of sources (Jeter in Jeter, 1980). Psychologists influenced by the theories of Jean Piaget considered children to be active learners, capable of determining the content and structure of their own learning. Criticisms of the quality of American education indicating schools were insensitive to children's needs (e.g., by Holt, 1964; Kozol, 1967), forced reconsideration of traditional organizational patterns and led to experimentation with the open education philosophy and the break-up of the age-graded curriculum. Large scale efforts to design, test, and implement systems of individualized instruction appeared during the 1960s and early 1970s, the most widely disseminated of these being Individually Guided Education (IGE), Individually Planned Instruction (IPI), and Project PLAN (in Gibbons, 1971; Marver, Note 9). The growth of computer technology also enabled development of computer-assisted instruction as a way to individualize learning rate and content. Since the mid-1970s, interest has also centered upon learning style, and its implication for adjusting methods and materials to account for children's preferred modes of learning (Charles, 1980).

During the 1960s, the field of special education has retreated from its earlier reliance upon a medical model for programming, where disabilities were identified, and children were assigned to categorical programs within which all were treated in the same way (Gotts, 1976). By the time of Public Law 94-142, the concept of emphasizing the individual in programming, primarily referred to in special education literature as the diagnostic/prescriptive method, was not new (Safer et al, 1978). As in regular education, a wealth of curriculum materials, kits, and other teaching resources were developed to assist teachers in devising appropriate interventions based on a child's unique strengths and weaknesses (Charles, 1980; Gotts, 1976).

Indeed, the hallmark of the concept of individualized instruction has been its diversity. Educational historians are quick to describe, and often at a loss to adequately categorize, the proliferation of programs and practices, both administrative and subject-specific, that have emerged to counter the perceived weaknesses of the traditional normative, age-graded systems of schooling that still undergird educational practices today (Doll, 1964; Gibbons, 1971; National School Public Relations Association, 1971; Talmage, 1980). These programs and practices constitute "a widely diverse family," influenced by a variety of technologies and expertise, interpreted in a wide array of ways, and "confounded by the ambiguity of their label" (Gibbons, 1971, p. 2). It is to be expected that the evaluation of such a concept has not produced satisfying results: attempts to evaluate the impact of individualization have been diffuse, with information about the effects of programs and practices upon children especially limited.

Many of the studies have been descriptive, focusing upon the form of individualization in a particular system; others have analyzed a particular approach or have contrasted particular approaches concerning their constructs; only a few studies have been concerned with the degree of individualization that was occurring (Jeter, 1980). Jeter criticized the large number of outcome studies that have been conducted as uninterpretable, due to their deficiency in assessing degree of implementation. Further, two major implementation studies cast some doubt about the comprehensiveness of implementation. Goodlad (1970) indicated that despite the importance given to ways to individualize instruction, the instruction in the 150 classrooms he observed was geared to group norms and expectancies. Shane (1960) surveyed dozens of grouping approaches and concluded they were too mechanistic as approaches to cope with the problem of individual differences. Charles (1980) reported that problems of implementation and criticisms of effectiveness dampened enthusiasm about the large-scale packaged programs (IGE, IPI, and Public PLAN). Semmel and Morgan (1978) reviewed the controversy over the validity of the diagnostic/prescriptive method and the empirical evidence concerning its effectiveness.

In a review by Katzenmeyer and Ingison (1980), a wealth of individualization studies were classified and described to determine the impact of individualization. For the most part, variables of interest in these studies included: 1) cognitive and affective outcomes, as measured by standardized tests and surveys; 2) instructional conditions such as open/formal settings, types of teacher questions and teacher interaction patterns; 3) quantity of instructional time; 4) student and/or teacher traits such as motivation, warmth, and sex differences; 5) student interest and participation; and 6) teacher satisfaction. They concluded that individualization worked when more than externals (such as adopting a new label, or schedule, or materials) were implemented. Though admittedly problematic, they cited many examples of achievement gain when what was tested reasonably reflected what had been instructed; there were very few instances where students in individualized classes did less well than those receiving traditional instruction.

However, as with the IEP studies, one area still to be researched is the consideration of how the individualized program is related to what a child learns. A result of the PREP Study (Putting Research into Education Practice) conducted by the U.S. Office of Education (National School Public Relations Association, 1971) determined that the 47 schools reviewed for current developments in individualized instruction paid far less attention to the relationship between stated objectives and evaluation procedures. Most of the emphasis was on whether children learn more, rather than on what they learned. Marver (Note 10) indicated he conducted a complete ERIC search of all the research concerning individualized education, programs, and curricula. Although considerable attention has been paid to this area, he found that no literature exists on the utilization of individualized plans by teachers. He confirmed the analysis in the Katzenmeyer and Ingison review that the studies have been program and subject specific or have examined teaching methods and environment. He concluded that no one has asked whether teachers use their individualized instruction plans, in regular or in special education.

Purpose of the Study

The preceding sections have highlighted parallel situations that exist in the special educational policy arena, in IEP implementation research, and in the educational community regarding individualization: that there is a gap in the consideration of what relationships exist between individualized instructional plans and the learner. While it is now commonly accepted that differences exist among individual learners, and that individualization is an educational strategy that naturally follows, the measure of its impact is only in its infancy. There is little research support regarding substantive effects of the use of IEPs or like-plans, particularly with regards to their impact on instructional behavior and child change. What research has been done indicates that individualization does change teaching and, with some caveats, learning. But there remains a lack of systematic inquiry regarding the qualitative content of those changes.

The IEP was widely proclaimed as a vehicle to foster individualization, but now the idea that it should and could be useful for instructional purposes is in disfavor. Administrative rule-making procedures have led to an understanding that the IEP is not to be considered an instructional tool. However, to be an "instructional tool" may not necessarily be synonymous with being a means to foster individualization. Because the two have been equated, lack of evaluation of the process of individualization has resulted. Problems may continue to exist with the implementation of IEPs, but to not complete the study of the implementation process by looking into classrooms would allow conclusions to be made on the basis of insufficient evidence. Other researchers sense this gap; the need for further investigation into this area can be witnessed in their statements proposing next research steps:

> 1. Instead of seeking ways to individualize programs, schools should be endeavoring to study the individuality of pupils and their teachers. (Shane & Shane, 1971)
>
> 2. Much remains to be understood. At issue, of course, is whether IEPs should be an instructional tool at all; and there is no empirical evidence regarding the effect that IEP utilization in the classroom might have on child outcomes. Research on the optimal use of IEPs as instructional tools and how to facilitate such use is in order. (Marver, p. 37, Note 11)
>
> 3. Beyond this minimal level [of compliance], educators must question the quality of IEP documents that have been produced. (Price & Goodman, 1980)
>
> 4. As data regarding the implementation of IEPs become more available, much more is needed to assure quality individualized instruction. (Morgan, 1981)

The need to begin a more systematic study of what happens in the classroom once the contractual process of developing the IEP is complete has been presented, given the sparcity of results and the lack of focused questions being asked both specific to IEPs and regarding the more general area of individualized instruction. What is currently appropriate is an examination of the qualitative determinants of an "individualized" program. Although the direct examination of that question is still premature, the focus on IEPs as exemplars of individualization bounds the domain of this study.

What is necessary is to add to the work of Marver and to other individualized education outcome studies a fuller description of how teachers utilize individual plans in the classroom so that relevant variables and contextual factors can be identified and posited as hypotheses for future research efforts. We have shown, with respect to IEPs, that Congressional intent to improve the quality of instruction was present, and that research has yet to consider the impact of the IEP process within the classroom. Until that is known, there is neither sufficient information to determine whether that intent has been met nor to propose changes in policy or practice. The purpose of this study, then, is to address a gap that exists in the literature by explicating how individual plans are translated into practice and to describe how their utilization influences or is influenced by teacher/child interaction, so that more valid research conclusions can be reached and so that educational policy and practice may be better informed.

CHAPTER II

AN ALTERNATIVE CONCEPTUALIZATION

In the foregoing chapter, the historical roots of the individualized educational program were traced, both within the legislative-judicial arena as well as within the context of the individualized education movement in the schools. A paradox was identified: while one of the intents of the IEP was to foster individualization, it has yet to be demonstrated in practice. In fact, even though the notion of an IEP appeared to make educational sense and to be consonant with what is known and accepted about differences in children's learning, its implementation has been dominated by questions surrounding the efficiency of the process and its utility in the classroom. Currently, there is discontent about IEPs being expressed by a profession that nonetheless values individualization as well as from a special education community that affirms individuality. Yet, except for pockets of expressed teacher satisfaction over the usefulness of IEPs to instruction, there has been very little research attention given to verify their effectiveness in fostering individualization.

Several types of explanations have been proposed to clarify this dilemma. There are some who contend that educational practice was inappropriately legislated, that the implementation of the IEP regulations interfered with individualized instruction and sound educational practices already occurring in the schools (Blaschke, 1979). Others say that the problem is one of training, that school personnel need to learn more about the development and utilization of individual plans and objectives (Brophy, 1980; Deno & Mirkin, 1980; Semmel &

Morgan, 1978). Still others see the problem from the perspective of innovation and change; that institutional resistance to innovation is likely and must be tended to (Havelock, 1973; Lortie, 1975; Weatherley & Lipsky, 1977).

However, the assessment and/or the solution of the problem may be more complex. The process of individualization, as presented to us in microcosm in Public Law 94-142 with its notion of an IEP, may not have been adequately conceptualized, and conclusions may have been premature.

An Alternative Conceptualization of Individualization

There is a need to broaden the base of the investigation of individualization to include systematic analysis of the relationships and discrepancies between plan and program. An alternative thesis to address the problem is proposed in this study. The design and conclusions of IEP research as well as that surrounding the evaluation of individualized education have not sufficiently attended to key features of the individualization process --- the teacher and the child.

The teacher acts and thinks in particular ways, influenced by earlier professional training, a history of experience in the classroom, and a set of values, all of which are mediated by on-going and current interactions. Janesick (1978), drawing from the themes of symbolic interactionists, described the teacher's perspective as a "reflective, socially-derived interpretation of that which he or she encounters, which serves as a basis for the actions he or she constructs" (p. 13). This perspective enables the teacher to aggregate a diversity of information about individual students as well as the class as a whole. It may also mediate the written plan, both in its interpretation as well as in its implementation. Results from research on teacher planning have demonstrated that what goes on in teachers' heads affects their classroom behavior (see below); hence, the study of the phenomenology of the teacher may be a critical factor in coming to understand the process of individualized programming.

To consider individualization only from the point of view of teacher intent is still limiting, however. Recognition and consideration of the learner's role and of the interactive impact of the teaching/learning situation is requisite to a fuller understanding of the concept of individualization. Yet to focus on outcome measures for either teacher (what types of questions were used? how were plans changed? how much were plans changed?) or student (what was learned? how much more was learned?) is also inadequate. As demonstrated earlier, there is sparse information regarding the description of child behavior in relationship to teacher plans. To complete the conceptualization of individualization as presented in this study, there is a need to explore the relationship of teacher plan to child behavior, particularly with regards to the extent child behavior is mediated by teacher intent, and to the degree of proactivity, if any, which emanates from the child as indicator of the direction of his or her learning.

Individualization, and the IEP, could be more broadly conceptualized as a comprehensive individualized program, which would integrate the dynamic and reciprocal relationships among a plan for individualization, its implementation by the teacher, and subsequent child behavior. To be considered comprehensive, an individualized program would reflect the characteristics of three components:

1. The contractual plan - the written document which prescribes the child's program as consented to by members of a planning team, including both school personnel and parents;

2. The phenomenological plan - the child's program as perceived and planned by the teacher; and

3. The empirical plan - the program as experienced by the child in the classroom.

These three components constitute the basis of this study, and the IEP provides an occasion to address the potential of this alternative conceptualization. In doing so, a more useful understanding of individualization may occur, one that is more comprehensive, more integrated, and more valid, because it takes into account the key features of the teaching/learning environment.

Support from the Inadequacy of Existing Practices

Perhaps the strongest critique of the evaluation of individualized programs is that little attention has been given to the relationship between the accountability system and the instructional system. While individualization certainly existed before it was legislated and before attempts were made to measure it, the child has rarely been the reference point in evaluation or outcome studies. Present accountability systems for individualized programs reflect the norms of group instructional systems: indices of success or failure have for the most part been group achievement scores, lesson plans, teaching practices, organizational changes, and/or teacher satisfaction. There remains an incongruity between individualization as a concept and the way it has been measured; the indices which have been commonly used are conceptually antithetical to the basic premise of individualization. To evaluate a program of individualization by using norm-referenced criteria may miss the essence of the program by burying the variance among children and their individual programs. Changes in an instructional system geared to support individualization ought to result in changes away from a norm-referenced accountability system.

Some attempts have been made to rectify this inadequacy. The diagnostic-prescriptive procedures from special education moved evaluation of individualization to a criterion-referenced base: there, individual child behavior was identified and placed into a category, which was associated with particular prescriptions for bringing about learning. Perhaps the closest example of moving to a child-referenced base for examination of program/individual relationship can be found in the models of baseline studies conducted in behavioral psychology (Kratochwill, 1978). However, even though those models track individual cases for indicators of change due to treatment/removal of treatment, their basis is uni-dimensional: a behavior is selected and observed as if in isolation from other behaviors and/or from interaction with other effects; furthermore, the behaviors selected are not chosen from a comprehensive pool. Additionally, there is not yet technological competence to synthesize their results or to move beyond isolated behavior.

The IEP appears to move the field another step closer to illuminating the evaluation problem, and to bringing more congruence to the relationship between program and accountability system. The IEP also is a child-referenced model, yet it takes into account multi-dimensional, more comprehensive behaviors than the baseline studies.

Furthermore, it is more consistent with the conceptual base of individualization. A child's goals and objectives are to be determined as a result of an assessment of the child's "present levels of educational performance" (Public Law 94-142 Section 602(a) (19)), gleaned from multi-sourced and multidisciplinary evaluations (Public Law 94-142 Regulations, Section 121a.533), rather than on the basis of courses of study, curricula, or grade-level expectations. What ought to result are individual curricula, goals and objectives, materials, services, and placement --- all based on child need rather than external criteria.

Yet despite these improvements, the IEP as a written plan can still only be a measure of individualization. The discrepancy between plan and behavior will always remain. It is the study of that discrepancy that is the focus of this research. The question posed is: What relationships exist between the plan as written and that which occurs in practice? Present practice and research have moved us closer to the ability to examine the relationship between plan and program, yet continue to assume a one-to-one correspondence between the two. We have also primarily relied on quantitative methods to assess program impact. There is a need for more descriptive inquiry to expand the conceptual base of the problem, and to obtain a view of individualization that is more viable with respect to assessment of its effectiveness.

Support from the Literature

Despite the wealth of research in the generic area of individualized instruction, the broader conception of a comprehensive program has not been broached. Yet the literature from the IEP studies, along with other studies in the area of teacher behavior, provide support for the existence and importance of the three components of individualization as conceptualized here.

The Written Plan

Marver (Note 12) undertook an extensive review of the literature in the generic area of individualization, and ironically failed to uncover any research where examination of individual plans was conducted. However, the major focus of the IEP studies has been the contractual component. Although limited to the study of this one component of a comprehensive individualized program, the IEP research has provided a wealth of information regarding the nature of the features of a contractual plan: descriptions of its elements, how many objectives are commonly listed, how it is developed, its development time, its typical length, its degree of internal consistency or lack of it, its participants and their relative status and influence, its strengths and weaknesses of the document, and its degree of compliance with federal regulations.

This emphasis has continued to be reflected in most of the current literature. The priority given to improving the content and development of the document has been considered justified as a means to foster individualization. Larsen and Poplin (1980) epitomize this trend: "Perhaps more than any other statement within the IEP document, establishing annual goals and general objectives determines the success of a handicapped child's education" (p. 223). While explication of the form and substance of the document as well as a recognition of the centrality of its goals and objectives may be necessary to assess and move the state of the art forward, it is certainly not sufficient to illuminate the process of individualization and hence, to evaluate how it has been fostered through the use of an IEP. While the contractual IEP can serve as a reference point for consideration of the other two components of individualization as conceptualized here, in and of itself it is not sufficient as a measure of individualization.

The Role of Teacher Intent

Once an IEP has been written, there is an expectation that it is somehow transmitted to those implementing the treatment program. Weatherley and Lipsky (1977) characterized this as a critical juncture in the implementation of policy, for it is those personnel at the direct point of service delivery, the "street level bureaucrats," who heavily influence how the intended policy is formulated in practice. Wright (Note 13) and Lortie (1975) also indicated that teachers perceive and do exert a great deal of control over what occurs behind the classroom doors.

For those teachers who attended IEP planning meetings, Marver's work (Note 14) illustrated that they transform the IEP into an "internalized" plan which is then used to guide classroom instruction. This was also implied in the cohort of teachers analyzed by Safer et al (1978); these teachers cited the IEP to be useful in their work, and were those who viewed planning as an integral part of the instructional process. Neither of these studies, however, explicated how the IEP was transformed or utilized in the classroom.

When teachers were not participants in the planning, Yoshida et al (1977) reported that communication of team decisions to them was informal, oral, and usually presented only one planner's perspective of the contractual agreement. These researchers questioned whether this state of affairs was conducive to the delivery of an appropriate educational program. Despite the theorized and observed centrality of the teacher in the instructional process, other results have not been forthcoming.

Support for the contention that a phenomenological plan is a critical component in the study of individualization comes from a related literature. Since 1970, a new strand of teacher behavior research has gained prominence, particularly through the research program on the mental life of teachers engaged in by the Institute for Research on Teaching at Michigan State University (Lanier, 1978). This line of inquiry has elaborated the role of the teacher in the planning and implementation of instruction, and is germane to this discussion.

Prior to 1970, the area of teacher planning received little attention. Smith (1977) reported that nearly all previous literature related to how teachers should plan rather than how they do plan; those studies which did exist focused upon singular aspects of teacher planning (such as time allocation) or were speculative in nature rather than empirically-based. Morine (1976) differentiated planning as occurring at interactive and preactive periods, the former involving decisions made during instruction (e.g., types of questions asked) and the latter, dealing with decisions made prior to the lesson. She concluded that there had been very little information gained about preactive decision-making, except to suggest some components in the process (as in Jackson, 1965).

Additional work by Morine (Morine, 1976; Morine-Dershimer, 1979; Morine in Brophy, 1980) illustrated that analysis of written plans that resulted from preactive decision-making led to insufficient evidence and erroneous conclusions. Rather than attending solely to written lesson plans, she identified a teacher plan, the teacher's detailed and comprehensive image or set of expectations for a lesson (Morine-Dershimer, 1979). Interviews, probing, and observations showed that teachers kept mental plans which included decisions about pupil abilities, objectives, teaching strategies and seating arrangements, rarely detailed in written documents. The existence of a mental plan was also substantiated in the work of Clark and Yinger (1979), who investigated both teacher planning practices as well as teacher judgements about teaching materials, and by Smith and Sendelbach (in Brophy, 1980).

The influence of the teacher upon the curriculum of the classroom was illustrated in another set of studies. Data from early empirical work in the area of preactive planning was obtained from self-reports of teachers, through the use of interviews, think-aloud techniques, and stimulated recall to gain information regarding the character of their decision-making processes. The studies showed that planning in practice differed from the linear model advanced by Tyler (1950) and popularized as behavioral objectives by Mager (1962). Objectives were not found to be a central focus in planning; rather, the teachers made instructional decisions on the basis of content (Peterson, Marx, & Clark, 1978; Zahorik, 1975), activities (Yinger, 1978), and/or student needs and interests (Clark & Yinger, 1979; Taylor, 1970). These, rather than objectives, influenced the nature of the program that was implemented.

Furthermore, in a review of teacher planning literature, Clark and Yinger (1980) concluded that the teacher dealt with the complexity of the teaching situation by simplifying it in some rational and adaptive way; in other words, planning transforms the curriculum into instruction, and teachers' implicit theories, values, and beliefs affect planning. Using stimulated recall of planning decisions, Morine-Dershimer and Valence (in Brophy, 1980) found that more effective teachers cut through the complexities, identifying and monitoring only those aspects of the teaching situation that are most relevant to the teacher; they honed down alternatives by eliminating those that had been proven ineffective. In an analysis of written plans, Morine (in Yinger, 1978) similarly found that teachers recasted objectives from those provided to suit their own purposes. Likewise, Smith and Sendelbach (in Brophy, 1980) found that teachers paid little attention to objectives provided in a science program of studies; they picked those they felt were appropriate or attractive to their students or which covered skills that they, the teachers, felt were important. One work which directly investigated the phenomenology of the teacher concluded that the teacher's classroom perspective is the curriculum (Janesick, 1978).

Focus on Classroom Reality

While the case for the influence of a teacher's mental plan on curriculum is supported by such research, consideration of the relationship between teacher intent and classroom reality has only just begun. Researchers who have compared plans to reality found that most decisions in interactive planning related to those made preactively; very few decisions included activities not originally planned for (Morine-Dershimer & Valence in Brophy, 1980). Peterson, Clark and Marx (1978) reported that teacher's preactive planning characteristics were consistent with their interactive behavior; e.g., teachers who stressed subject matter in planning also stressed it in teaching. This consistency raised concerns over rigidity, however. As long as lessons proceeded as expected, teachers tended to work on "automatic pilot;" their thoughts involved only minor fine tuning, and concern for objectives was low (Connors in Brophy, 1980; Morine-Dershimer & Valence in Brophy, 1980; McNair & Joyce, 1979; Shroyer in Brophy, 1980). When teachers encountered a problem, they were often unable to solve it, and tended to postpone rather than abandon decisions (Morine-Dershimer & Valence in Brophy, 1980; McNair & Joyce, 1979; Shroyer in Brophy, 1980).

Studies of teacher planning characteristics also tend to support this picture of rigidity, particularly with regards to responsiveness to students. In a study comparing teachers who planned with those who did not, Zahorik (1970) found that planning made teachers' thinking inflexible and not as responsive to students. Clark and Yinger (1979) classified planners as incremental or comprehensive; those who planned more elaborately and for a longer period of time were less apt to adjust to feedback from students; those who planned in short steps were more likely to remain in tune with their students. Likewise, teachers whose planning emphasized objectives were more apt to stay with their plans; more process oriented teachers changed their plans in response to student ideas (Peterson, Marx & Clark, 1978).

These studies showed that what is inside a teacher's head does indeed effect classroom behavior. Follow-up is still lacking, however, regarding the reciprocal effect of student response upon teacher plans. While some studies have shown that teachers think about pupils more than facts or objectives during lessons (McNair & Joyce, 1979; Connors in Brophy, 1980), little more is known about the pupil's influence in modifying the curriculum (as argued for by the conceptualization of an empirical plan for this study). In fact, what evidence exists indicates that teachers base their decisions about students more upon past information and hunches, and take them as facts rather than hypotheses (Borko et al, 1979; Marland in Brophy, 1980; Morine-Dershimer, 1979). Again, the reality of the teaching situation does not seem to intrude upon teachers' interactive planning processes. Yet other researchers studying classrooms where there is differentiated or individualized interaction between teacher and child show that both are contributors to decisions regarding the process and content of learning (Bussis & Chittenden, 1970; Bussis, Chittenden, & Amarel, 1976). This area is a necessary third component in the examination of the process of individualization.

Integrated Studies

The related literature confirms that much more than a written document must be studied to examine the process of individualization. The existence of teacher intent as a major influence upon how a curriculum or program of studies is translated into classroom practice has already been documented. Most current research also illustrates that there is a relationship between what is planned to what occurs in practice. The weakness of this vein of inquiry is that it has primarily been concerned with changes in teacher behavior, and that it has left the impact of child behavior upon the instructional process to be more fully explicated.

Just as the research lent support to the existence of three distinct components of a comprehensive individualized program, only a few researchers have attempted to relate all three as proposed in this study. Smith and Sendelbach (in Brophy, 1980) have begun a research program to analyze programs as found in teachers' guides, teachers' intended approaches as developed in preactive planning, and their actual approaches in classroom interactions. These have been conceived as three distinct studies, however. Bryk, Meisels, and Markowitz (1979) did develop and implement a design which integrated all three components in their evaluation of the effectiveness of a preschool program for children with special needs. They cited the need to improve procedures for data collection regarding the program as-intended and as-experienced; teachers were interviewed regarding their intent only at the end of the year, and observational data on the children were limited.

No other studies have sought to relate all components of an individualized program, from written document to teacher intent to the program-as-experienced by the child. Yet calls from the field for next research steps indicate that this is a relevant and needed area of inquiry:

1. There is a need for more research on the

> psychology of planning . . . a need to study the relationships between planning and subsequent action. (Clark & Yinger, 1977, 1979)
>
> 2. The evaluation of plans is rarely based on how they worked out. (Yinger, 1978)
> 3. Research on teachers' interactive thinking and decision-making . . . is a particularly fertile source of hypotheses about effective teaching, particularly issues of individualization of instruction . . . (Brophy, 1980)
> 4. There is a need to focus on examining relationships among teacher plan, classroom reality, and patterns of information processing and decision-making. (Morine-Dershimer, 1979)
> 5. Greater attention in future evaluation efforts should be focused on developing procedures for gathering data on the program as experienced by the child. (Bryk, Meisels, & Markowitz, 1979)
> 6. We need research on the optimal use of IEPs and how to facilitate such use . . . and of the effect of IEP use on student outcomes. (Marver, Note 15)
> 7. [There is a need] to clarify the effects of planning by studying quality more than quantity. (Peterson, Marx, & Clark, 1978)

The Research Questions

In this chapter, an alternative conceptualization for the study of individualization, and IEPs in particular, has been proposed. It was shown, through a review of related literature in teacher planning, that the three constructs of contractual, phenomenological and empirical plans are viable, and that further research is needed to discern relationships among them. By gathering information about each of the components, and by analyzing interrelationships and/or discrepancies among them, a more comprehensive framework for the understanding of individualization may emerge. Such a framework could provide a design for subsequent inquiry into critical variables and hypotheses regarding development and utilization of individual plans, the role and influence of the teacher in implementing plans, and the effect of feedback from child behavior upon either of these.

As the researcher began the investigation of individualized instruction as conceptualized, several questions influenced and permeated the design and execution of the inquiry. These questions were:

1. What is the degree of match between a written plan and teacher intent?
2. What is the degree of match between teacher intent and program-as-experienced by the child?
3. Does a program-as-experienced diverge from written plan and/or teacher intent? To what degree? In what ways?
4. Is there a relationship between settings and the degree of discrepancy among the various components of a comprehensive individualization model?

How the design and execution of the study were developed to bring to light enlighten those questions is described in the next four chapters. Chapter III provides a rationale for the selection of the methodology most appropriate to address those questions; Chapter IV sets forth the overall plan of the study. Then, in Chapters V, VI, and VII respectively, the execution of the study of each of the three components is explicated.

CHAPTER III

THEORETICAL BASES OF THE RESEARCH METHODOLOGY

Quite often in the case of educational innovation, research programs leap to the assessment of impact or "effectiveness." There is a press to ascertain whether changes in practice are having an effect upon some prespecified measures. Most such research has been characterized by the use of hypothetico-deductive paradigms, where hypotheses and variables are preselected on the basis of existing theory and current research literature. It is becoming more and more recognized, however, that such an approach may be premature or even inappropriate, and often runs the risk of generating results that are irrelevant to practice. It is the purpose of this chapter to illustrate how a consideration of both the state of the art and the question at hand is necessary to the selection of an appropriate research methodology.

Rationale for Selection of a Naturalistic Methodology

The purpose of this study was to explore the interrelationships and/or discrepancies which may exist when one conceptualizes individualization as having three distinct perspectives: its contractual form, its phenomenological construction, and its empirical resolution. If it is true that a research design should be carefully fitted to the question and the nature of the phenomenon to be studied, then the investigation of individualization conceptualized here poses a methodological challenge to the traditional hypothetico-deductive paradigm for inquiry.

The very nature of the classroom itself makes critical demands on the choice of methodology. Bryk, Meisels, and Markowitz (1979) characterize classrooms, especially those more informally structured and modeled after the open education philosophy, as information-rich environments; conventional quantitative, experimental approaches may provide only a highly segmented picture of their nature. In a classroom, there are times when there is a formal locus of learning; the teacher may exercise primary control, and instruction may follow a predetermined sequence. This situation may be more amenable to experimental strategies.

Yet opportunities for learning are numerous in the classroom experience, and they are not always controllable or predictable *a priori*, conditions critical to the experimental paradigm. The program a child experiences cannot be fully defined until its actors are engaged; its scope, sequence, and patterns can only be partially predicted and controlled. Children's interests and initiative may cause them to be attracted to things unaided by the teacher. Interactions, both between teacher and child and among children, are multiple and variable, each affecting the other. Classroom life is a complex, dynamic and interactive phenomenon, and the research method selected to describe it must be able to capture these qualities.

The fields of educational research and evaluation are undergoing considerable reappraisal because of the acknowledged impotence of traditional data-gathering activities to inform or improve classroom instruction. Many studies have utilized the classroom as the unit of focus (see Dunkin & Biddle, 1974 or Travers, 1973 for reviews of these), but there is a preponderance of criticism regarding the limited contributions they have made, called by Bussis and Chittenden

(1970) the "non-significant-difference syndrome." Richer (1975) critiqued the selection of variables as reason for the prevalence of null findings and inconsistent results in school effects research; similar and recurring criticisms of methodological problems have plagued researchers dealing with various dimensions of the teaching/learning situation in classrooms (Averch et al, 1972; Bussis, Chittenden, & Amarel, 1976; Brophy, 1979a, 1979b; Doyle, 1978; Scott, 1977; Willems & Raush, 1969). Doyle (1978) concluded that this interpretative work needed further elaboration and refinement.

Traditional assumptions in this area have held that educational programs can be studied apart from the context in which they are used. Further, there has been an assumption that interactions can be predicted in advance, and that extraneous influences from the teacher or the child would not seriously alter outcomes (Bussis, Chittenden, & Amarel, 1976). Richer (1975) contended that in most designs, classrooms have been perceived in terms of an input/output approach; Doyle (1978) cited the over-emphasis on overt behaviors under the guise of objectivity as limiting understanding of what mediates instructional effects. Bryk, Meisels, and Markowitz (1979) took issue with the domination of statistical principles of experimental design which derive average outcome measures as appropriate summary measures of impact. Along with ethical, social, political, and logistical problems tied to such an approach, they also claim that the situation is exacerbated when dealing with highly individualized programs.

While some advocate for the development of improved instrumentation and more sophisticated statistical design techniques to meet these criticisms, (Brophy, 1979a, 1979b), another group of researchers has urged consideration of a new paradigm instead (Bussis, Chittenden, & Amarel, 1976; Smith, 1978; Wilson, 1977). There is growing realization that in order to uncover the salient dimensions of classroom life, the very complexity and variability of behavior in its natural habitat must be better understood in order to produce sounder program planning (Scott, Note 16). Brooks and Baumeister (1977) made a similarly strong plea for ecological validity in research on mental retardation, just as Bronfenbrenner (1979) chided the field of developmental psychology for limiting its scope to the explanation of "strange behavior of children in strange places with strange adults for the briefest periods of time" (p. 19). In his critique of evaluation studies, Guba (1978) maintained that results have not been as fruitful as had been hoped or expected, and concluded that a major reason for this state of affairs seems to be a lack of a methodology uniquely suited to evaluation's needs. Doyle (1978) called for a change in question, from "Which instructional conditions are most effective?" to "How do instructional effects occur?" (p. 188). These commentaries point to the need for an approach which would build and verify a more explanatory and meaningful model of what goes on in classroom life, and lead to a recommendation of a naturalistic paradigm. Willems and Raush (1969) and Wilson (1977) went so far as to suggest that the value of a naturalistic approach lies in its potential for capturing aspects of behavior not accessible through standard correlational or experimental studies.

While part of the argument for moving to a naturalistic paradigm derives from the complex and variable nature of the phenomenon to be studied, another criterion for selection of such an approach rests with the state of the art, which affects the nature of the questions to be asked. As evidenced earlier, the relationship of plan to practice is only beginning to be studied. There is not yet consensus on relevant variables and dimensions, nor is there a relevant conceptual/theoretical framework to guide and focus the research. Richer (1975) suggested that the construction of such a framework is best approached from definitions of reality manifested by teachers and students, and that such data can only be derived from observations in natural classroom settings. Glaser and Strauss (1967) argued that theories are likely to be better to the degree that they have been inductively developed during research. Finally, Doyle (1978) found it necessary not only to generate a new set of variables for correlational studies, but more importantly, to build and verify a more coherent explanatory model of how classrooms work, which can then be used to ask questions and interpret answers about the individualization of instruction.

Guba (1978) synthesized eight arguments for selection of naturalistic inquiry as a preferred mode to research a question (pp. 23-30). These have been extrapolated as arguments for the use of a naturalistic paradigm in this study of individualization:

1. To enlarge the arsenal of investigative strategies for dealing with emergent questions of interest. The classroom setting necessary for this study has been shown to be an enigmatic phenomenon, especially given the history of traditional designs utilizing the scientific paradigm. A naturalistic approach holds promise of yielding more information of major

concern and of providing a less distorted view of what occurs there.

2. To provide an acceptable basis for studying process. The act of individualization is a process involving a plan, a teacher, and a child. As such, it is interactive and dynamic. The experimental mode has led to the study of process through inferences regarding known input and observed output. The naturalistic mode offers an approach to study it more directly through observation. Further, given the state of the art surrounding the question, not enough of the salient dimensions of the process of individualization or IEP utilization has been identified to select antecedent conditions for manipulation or outcomes for measurement.

3. To provide an alternative where it is impossible to meet the technical assumptions of the experimental approach in the real world. When experiments are attempted in the real world, the method suffers because it is not possible to exercise control over all the relevant physical or statistical variables. Assumptions such as random selection or isolation of treatment cannot be easily met in classrooms that are complex and dynamic, and where programs emerge as children and teachers interact. Classrooms, methods of instruction, and child behaviors are not invariable across sites; the very essence of an investigation of individualized planning assumes variant contexts as well as treatments, unlike the laboratory where

the research model rests on control of both treatment and context variance.

4. To better assess the implications of treatment-situation interaction. Because of the complex nature of the teaching/learning situation, an understanding of interaction effects may assist the explication of its dynamics. Rather than consigning particular variables to margins of error, the naturalistic paradigm emphasizes detailed descriptions of such interactions.

5. To redress the balance between reconstructed logic and logic-in-use. While for some questions the experimental model is appropriate, there is a need to recognize that other models may be relevant in the pursuit of inquiry. If an IEP is only a measure of individualization, then reconstructed logic may be inadequate to explain it. By investigating how people actually behave, especially through a process of triangulation to assure the reconstruction is a valid explanation, some of the more less-than-satisfying results of experimental research in classrooms can be balanced.

6. To avoid implicit shaping of possible outcomes. Since there is insufficient evidence concerning relevant variables and their relationships in the areas of individualization and IEPs, designs which involve their manipulation may contaminate what is there to be studied with what the researcher

introduces in the process of studying it. A naturalistic approach may uncover heretofore unknown relationships and allow variables to be identified without artificially and perhaps incorrectly linking them to other variables.

7. To optimize generalizability. Manipulation of conditions may have the effect of creating a model only generalizable to the laboratory situation. The purpose of this research is to derive concepts from the ongoing observation of classroom behavior so that researchers and practitioners can be informed of the dimensions of interest in real settings. Further, Cronbach (in Guba, 1978, p. 29) suggested any generalization should be a working hypothesis rather than a conclusion, for generalizations decay, especially in social and behavioral situations where processes cannot be regarded as steady. The intent of this study is to define an activity so that its full range of factors is taken into account, and so that theories from which to ask questions and interpret findings can begin to be constructed.

8. To meet, optimally, certain practical criteria for the derivation made from an inquiry. It is the intent that the interpretations derived from this study have applicability to classroom instruction, teacher education, and policy formulation. As such, a naturalistic approach has higher probability of relevance and communicative power because the findings will better fit the total data than *a priori*

hypotheses tested by limited data segments may.

Nature of the Naturalistic Paradigm

Tunnell (1977) has offered perhaps the most parsimonious definition of naturalistic research. He identified three dimensions of naturalness: natural setting, natural behavior, and natural treatment, each of which "injects a bit of the real world into psychological research, each [of which] reflects a separate aspect of reality" (p. 426). As a result, research problems which incorporate these dimensions have the advantages of discovering new empirical laws, of grounding results in reality (internal validity), and of increasing potential for achieving generalizability (external validity).

Perhaps the most classic distinction between naturalistic research and other types of inquiry was first posed by Willems and Raush (1969), and later modified by Guba (1978). They descibed inquiry along two continua: constraints placed upon antecedent conditions (independent variables) and constraints placed upon possible outcomes (dependent variables). The most ideal naturalistic inquiry is low on both types of constraints; the most ideal experimental design is high on controlling both antecedent conditions and outcomes. Figure 3.1 provides some additional examples of types of studies falling into the various quadrants.

The use of the naturalistic paradigm for studying classrooms is growing in educational and psychological research (Wilson, 1977). Doyle (1978) reviewed alternative ways of thinking about teaching in terms of research paradigms; one such classification is that of

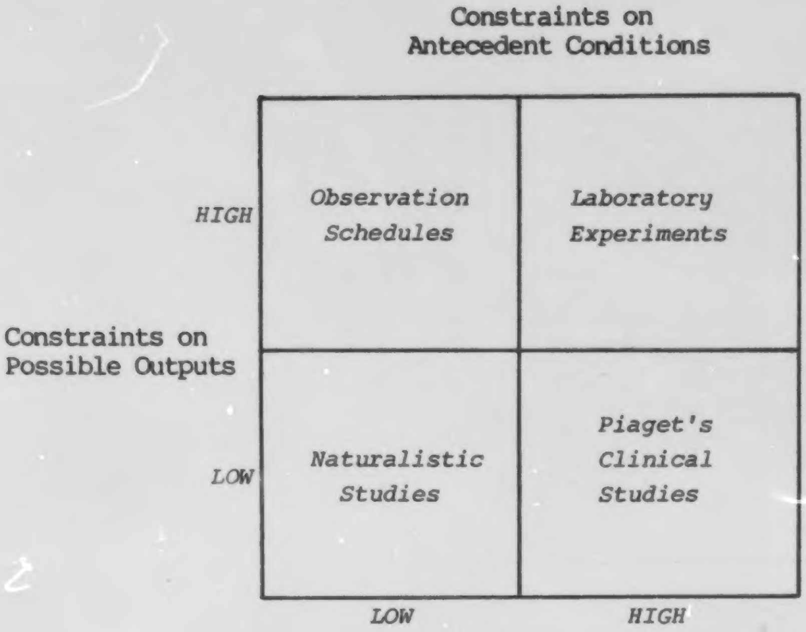
Constraints on
Antecedent Conditions
HIGH
Observation
Schedules
Laboratory
Experiments
Constraints on
Possible Outputs
LOW
Naturalistic
Studies
Piaget's
Clinical
Studies
LOW
HIGH

Figure 3.1. Representation of the dimensions of constraints for various types of inquiry.

classroom ecology, which brings together recent ethnographic studies of classrooms (for example, Jackson, 1968; Rist, 1973; Smith & Geoffrey, 1968) with the ecological model for exploring relationships between behavior and setting (Barker, 1968; Gump, 1964, 1969; Kounin, 1970; Willems, 1973a, 1973b). The research on teacher planning cited earlier, especially that emanating from the Institute for Research on Planning, also has a strong ethnographic flavor, utilizing participant-observation, analysis of teacher logs and journals, recordings of teachers' "thinking-aloud," and videotapes of classroom activities. To a lesser degree, much of the IEP research was based on a naturalistic approach; those studies utilized teacher interviews and observations to construct the themes and issues that were reported. All of these educational studies demonstrate Doyle's

(1978) three hallmarks of the nature of a naturalistic methodology:

> 1. a high priority on detailed, long-term observation of behavior in natural settings;
>
> 2. few decisions about what behavior to record prior to conducting observations, in a self-conscious effort to minimize preconceived notions about meaning and interrelationships of behavior; and
>
> 3. conceptual reduction of data through a continuous process of fashioning interpretive propositions to account for intrinsic patterns of events and processes in the setting being observed. (p. 182)

Up to this point, there has been an attempt to demonstrate that there are at least three reasons a naturalistic paradigm is an appropriate methodology for the study of individualized planning as conceptualized. First, in order to capture the complexities and dynamics of classroom life, a methodology which provides rich description and limited intervention appears essential. Second, there is a dearth of research on the utilization of IEPs, and the research on teacher planning has yet to focus upon the child and the integrated relationship of plan-teacher-child; therefore, the need for development of a theoretical framework for future research and the identification of valid variables further supports a methodology designed to generate hypotheses rather then to test or predict. Finally, the nature of the question itself suggests the need to describe the phenomenological aspects of planning as well as the dimensions of setting-behavior interactions, both inherent to a naturalistic paradigm.

Because of the particular dimensions of the problem, however, no one naturalistic technique seemed to suffice. In order to capture and relate the differential dimensions of written plan, teacher intent, and child behavior, the notion of "mixed, multiple strategies," coined by Bryk, Meisels, and Markowitz (1979), had particular relevance. Each strategy provides a different view of the phenomenon and taken together, can create a total picture that more reliably documents it. The remainder of this chapter will describe the conceptual bases which supported the selection of those strategies.

The Research Model

The specific research model selected to address the question was a descriptive case study. Sanders (Note 17) argued that a descriptive study of a particular case yields 1) a better understanding of the processes of events, 2) discovery of context characteristics, and 3) insights, new interpretations, and/or alternative explanations of a phenomenon. A systematic, in-depth examination of a case can contribute information that will be useful in making some statements about the nature of individualized programming.

Because of the complexity of the milieu which surrounds the concept of the child's program, it is difficult to extract its essence adequately, even with a naturalistic approach. Furthermore, because of the selective attention and memory of human information processing, a single researcher risks accuracy and comprehensiveness of his/her findings. Thus, the case study model was enhanced by the use of mixed, multiple field research methods.

The design of this study reflected the conception of Cicourel and his associates (1974) to relieve some of the aforementioned difficulties. Cicourel advocated creating circumstances where the same and different respondents react to information attained on a given occasion, a process he termed "indefinite triangulation." These varying perspectives add to the account, and most importantly, their discrepancies become the focus of attention. Hence, it is possible that the subjects themselves become "temporary research assistants" in order for the researcher to gain more insight into the phenomenon being studied (Cicourel et al, 1974, p. 199). Mehan (in Cicourel et al, 1974) substantiated the value of multiple sources of input in order to discern that what teachers intended was not interpreted that way by children, a finding also reported by Ehman and Wolfson as well as Nash (in Good & Brophy, 1973). The overall design of this study rested on the implementation of this assumption. Not only were varying respondents' perceptions of the data sought, but the phenomenon was also triangulated by investigating its multiple forms; i.e., the written document, the teacher's mental plans, and the child's behavior.

Several naturalistic models were incorporated into the design because of the demands of the differential characteristics of the various components of individualization. In order to describe the accommodation of the child to his or her environment and the extent this relationship is mediated by teacher plan, the tenets of ecological psychology formed the framework for much of the methodology which was developed to study the empirical plan. Roger Barker, the progenitor of the ecological approach, defined it as the study of "behavior and the environment [as] mutually causally related" (Barker, 1965, p. 9). Such an approach understands an event as the interface between behavior and environment, and treats that interface as interdependent rather than linear or causal, as other methodologies do. An ecological approach does not interfere with the normal course of events; rather, non-interfering methods are used to observe persons in their natural habitat and to document their on-going, everyday stream of behavior.

Barker developed a way of recording data about behavior which provided "a relatively intact specimen of behavior, [and which presented] a multi-variable picture of the molar aspects of behavior and situation with many of the simultaneous and successive interrelations preserved" (Barker & Wright, 1971, p. 16). Coined the specimen record, this type of data is a "detailed, sequential narrative of a long segment of a child's behavior and situation as seen by skilled observers . . . it describes in concrete detail the stream of the child's behavior and psychological habitat" (Barker & Wright, 1971, p. 15).

Another hallmark of the ecological approach is that the stream of behavior is analyzed in terms of naturally-occurring units which are the function of behavior rather than arbitrary ones selected a priori by the researcher; various types of behaviorally-ascribed units are illustrated in Barker and Wright (1971), Schoggen (1963), and Scott and Eklund (Note 18), and were adapted for use in this study.

Finally, Barker's (1968) concept of the influence of behavior settings upon behavior takes into account both the physical properties of a setting as well as its attributed "standing pattern of behavior." This was thought to be "persisting, extra-individual behavior phenomena," independent of particular persons, that were attached to particular places, things, and times (Barker, 1978, pp. 25-26). In this way, individual behavior can come to be understood in terms of the relationship between persons and objects in carrying out the "program" of a particular setting.

Each of these central tenets of ecological psychology had relevance to the study of the empirical plan: capturing the child's stream of behavior in the classroom in an unobtrusive way; collapsing the stream into units that emerge from the child's intent; and analyzing the program in which the child engages in terms of the interaction of people, objects, and expected patterns of behavior. An ecological approach to the study of behavior in situ promised to yield a more complete and valid understanding of what had been conceptualized as the empirical plan.

Characteristics of an ethnographic approach to the study of behavior provided a conceptual base for the study of the teacher intent, or the phenomenological plan. Ethnography has a large precedence of use and acceptance in anthropology, sociology, and political science (Smith, 1978). Wilson (1977) set forth a characterization of ethnography which further explains its relationship to naturalistic inquiry as well as its appropriateness to the study of the phenomenological plan. Ethnography holds fundamentally different claims about the nature of human behavior and the best ways of coming to understand it; its rationale is based upon adherence to two perpectives, a naturalistic-ecological one and a qualitative-phenomenological one. Ethnographers believe behavior is influenced by context, and therefore, psychological events must be studied in their natural settings. Secondly, they believe there is more meaning to an event that its observable "facts," that there is a need to understand behavior by understanding the framework within which subjects interpret their thoughts, feelings, and actions. Therefore, in an ethnographic approach, intersubjectivity is sought after in an attempt to avoid imposing a priori limitations on the data. This quest for intersubjectivity, for insight into the phenomenology of an event, is termed by Wilson (1977) as "disciplined subjectivity." A mainstay of this method is the ethnographic interview, coupled with a variety of field observations across a variety of settings; both these techniques were utilized to describe the phenomenology of the teacher.

The naturalistic approach relies heavily on the human being as the instrument which seeks to understand a particular phenomenon (Guba & Lincoln, 1981). Earlier, Cicourel's notion of indefinite triangulation was offered as one method of accounting for shortcomings inherent to the instrument. The use of audio and video recordings provide yet another way to decrease the possibility of the selective attention and memory of the researcher constraining the data (Cicourel et al, 1981). Such technologies, though not without side effects themselves, can extend the researcher's observational limitations in studying naturalistic, interactional settings by capturing the subtleties of emergent interaction more completely, objectively, and permanently, to be understood and/or identified perhaps only at a later date. In addition, such frozen records of thoughts and behavior create a data bank for validating and replicating researchers' procedures and findings as well as for repeated study of the same event (Cicourel, 1974; Kounin, 1968).

So far, the conceptual bases for the collection of data have been set forth. The task posed for the reduction and synthesis of such data required the development of methodological strategies which would allow for the emergence of systematic and objective inferences. The basic tenets of content analysis provided an appropriate framework for guiding decisions regarding the organization and interpretation of the data derived from all three components of individualization (Bogdan & Taylor, 1975; Guba & Lincoln, 1981). The conceptual tenets of content analysis underpinned the methodologies developed for the analysis of documents, interviews, and the behavior stream as well (Bogdan & Taylor, 1975; Guba & Lincoln, 1981). The overall relevance of content analysis to this task is discussed by Guba and Lincoln (1981):

> The creation of classification systems, the decision-making with regards to units of analysis, and the formulation of taxonomic headings for subjects, concerns, issues, or behaviors under investigation --- all utilize the methods of content analysis and abide by the same procedural canons. The methodologies in all three areas are virtually identical. (p. 247)

The "procedural canons" for content analysis have been put forth by Holsti (1969), a communications theorist. He defines content analysis as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (p. 14). He set forth several criteria which direct what constitutes solid and rigorous analysis:

1. Content analysis is rule-bound. In order to minimize analyst subjectivity, rules and procedures are formulated in such a way that subsequent analysts can follow those procedures with the same data, and arrive at similar conclusions.

2. Content analysis is systematic. Inclusion or exclusion of data is done according to consistently applied rules, and

avoids admission of biased materials which may be overbalanced in support of the researcher's hypotheses. Budd et al, (1967) defines this as a means to avoid selective attention in analysis.

3. The findings from content analysis must have theoretical relevance. Results take on meaning when compared to other attributes of the document or variables (Budd et al, 1967). Guba and Lincoln (1981) extend this criterion to naturalistic inquiry by illustrating that results facilitate the development of insights about context, that would serve instances beyond that of the particular document.

4. Content analysis deals with manifest content, particularly at the coding stage. Inferences about latent meanings of messages can occur at the interpretative stage, but with independent corroboration.

The process of category construction is central to the content analysis task. Once the data are collected, some system is necessary for drawing categories from them. It is the special case of a naturalistic approach that its goal is to derive categories that are grounded in the data rather than to determine them a priori. Again, Holsti (1969) presents the decision-making frame necessary to "systematically [transform and aggregate raw data] into units which permit precise description of relevant content characteristics" (p. 94). Those decisions which confront the analyst include:

- * How is the research problem defined (operationalized) in terms of categories?
- * What unit of content is to be classified?
- * What system of enumeration will be used?

These decisions are interrelated, and the choices carry assumptions about the data and the inferences to be drawn from them. Since there is no "best" method for transforming data which applies to all research, the decisions must be grounded in the research question, and theory and techniques intimately linked (Carney, 1972; Guba & Lincoln, 1981; Holsti, 1969): "In essence, unless [one] can state explicitly why he is analyzing documents, he cannot intelligently work out a plan on how to do it" (Holsti, 1969, p. 94). Similarly stated, "the question comes first; content analysis will not provide it" (Carney, 1972, p. 284).

Finally, content analysis concerns itself with rules of category construction, again explicated by Holsti (1969), and reviewed by Budd (1967), Carney (1972), and Guba and Lincoln (1981). The rules define what is and is not to be included and how data will be aggregated. The criteria for rigorous category construction begin with the necessity that the categories reflect the investigator's research question. This means the researcher must include both conceptual and operational definitions: the variables of interest must be clearly conceptualized, and indicators must be valid enough representations of those concepts and precise enough to guide coders to reliably identify them. Decisions about degree of specificity within categories are also related to the research question.

In addition, categories must not only be exhaustive, in that all relevant items may be placed in one category or another, but also mutually exclusive, in that no item can fit into more than one cell. Furthermore, categories must be independent; assignment of any item to one category should not affect the classification of other data, especially when data are ordinal in nature. Finally, each category must be derived from a single classification principle so that different levels of analysis are kept separate.

In summary, content analysis and category construction procedures framed the analytic aspects of the study. Data collection itself was guided by principles which emanated from ethnography and ecological psychology as well as from Cicourel's commentaries regarding the need for strategies which would decrease the effects of selective attention and memory. While the inquiry rested on a case study model, mixed, multiple strategies augmented the description of the case. Triangulation was accomplished both through multiple informants and through multiple media. The data about IEPs emerged from researcher observation as well as from teacher-subject descriptions and validation of the data produced. Electronic recordings captured both verbal and visual descriptors of the program as intended and the program as experienced. Additionally, the videotape contributed a less selective rendition of at least one of the forms of the individualization, the empirical one. Taken together, the triangulation and the use of frozen records permitted a "thick description" of the nature of an individualized program. The details of the operationalization of this model will be explicated in the next chapter.

CHAPTER IV

THE RESEARCH PLAN

The design of the study was both driven and bounded by the conceptualization of individualization as existing in three forms: its contractual, phenomenological, and empirical components. Scott (Note 19) contends that a connotation of naturalistic research is that the design of the study ought to be driven by the question: there should exist a match between question, method, and conceptual base on one hand and natural behavior in the natural habitat on the other. The questions posed in this study focused decisions about data collection such that optimal information about all three would be elicited with minimal intervention or obtrusiveness on the part of the researcher. Differing data collection strategies were necessary to portray the characteristics of each form of the IEP.

On the other hand, the strategies for collapsing the data during analysis were not only consonant with the question, but bounded by it. Guba (1978) cited two types of focusing strategies germane to this: those which seek convergence, and involve the collapsing of data; and those which seek divergence, and involve the "fleshing out" of data to describe a phenomenon comprehensively. Therefore, while a great deal of data were collected about teacher intent and classroom activities, the strategies utilized to synthesize the data and report findings were specifically geared to identifying similarities and discrepancies across the objectives either stated or implied in each component of individualization.

The Research Plan

The purpose of this chapter is to present an overview to the research plan of the study, including selection of the research setting and the subjects. (In the chapters that follow, additional details of how methods were matched to questions and the use of convergent and divergent strategies for the varying aspects of the study are presented.)

The research plan consisted of four phases: 1) entry and selection of the research setting; 2) field observation; 3) focused observation and retrospection; and 4) analysis and validation. Each of these will be described separately, although in actuality they did not always occur as linearly as the text may imply.

Phase 1: Entry and Selection of the Research Setting

Conversations were initiated with administrators of nearby preschool and primary grade programs to seek access to classrooms that potentially might serve as the research setting. The study was described to them in terms of its general goals; i.e., to investigate what happened in the classroom once an IEP was developed. In addition, anticipated research strategies were discussed, particularly the need to focus on a teacher and one child and to collect data through an extended series of observations, interviews, and videotape sessions.

The following were established as criteria for the selection of a classroom as the research setting:

1. Presence of at least one child with an IEP, whose parents would consent to his/her participation as the child-subject.

2. Similarity to what might be described as a typical classroom of its type.
3. Presence of a sufficient variety of activities, including informally-structured periods of time, to allow for observation of a maximal amount of objectives from the IEP (i.e., free choice activities; individual/small group instruction; independent work activities).
4. Sufficient contact between teacher and child (e.g., the child is not left alone for long periods of time; instruction does not occur primarily with another adult such as a student teacher or an instructional associate).
5. A teacher judged competent by both administrator and researcher.
6. Consent of the teacher to participate as the teacher-subject.
7. Access to the child's written IEP.
8. Accessibility of the setting, including distance to be travelled to the school and a room arrangement that would allow for optimum placement of stationary videotape equipment.

The program administrators identified several kindergarten classrooms where handicapped children were mainstreamed and two preschool special education classrooms that were housed within the public school system as potential research sites. After observation of five classrooms, three were eliminated, primarily because of failure to meet the criteria regarding variety of activities, contact between teacher and child, and/or accessibility of the classroom for videotape equipment. For instance, in one classroom where a handicapped child was mainstreamed with non-handicapped children, the teacher interacted with the child very little; much of the child's time was spent playing in the block area. In another classroom, the physical arrangements for housing learning centers were such that a stationary video camera would not have had a clear view of large portions of the classroom where children worked. The two sites that remained were part of a preschool program for handicapped children.

Further conversations were held with administrators of the preschool program. They arranged for additional observations, discussed the study with potential teacher-subjects, and arranged for a face-to-face meeting between the teachers and the researcher. The study was described to the teachers in terms of its more specific intent; i.e., to observe a child's classroom program and to determine how it related to the IEP that had been developed for him/her. In addition, the need to conduct teacher interviews regarding teacher goals and objectives for the child was presented. Finally, details of what would be desired in terms of observations, documents, and use of videotape were provided to the teacher. Demands on teacher time were estimated, and renumeration was negotiated. Teachers of both classrooms were amenable to participation; further observations and discussions led to a selection of one of the classrooms as the research setting, primarily on the basis of researcher intuition since very little differences existed between the two choices.

Once the teacher consented to be a subject, the formal part of the entry phase neared completion. A request for permission to conduct research in the public schools was filed with the Indiana University Office of Teacher Education and Extended Services; full documentation of the proposed study was submitted to the University Committee for the Review of Human Subjects, and was subsequently approved.

Actual entry, in terms of gaining the confidence of the teacher and desensitizing her to the research process and the presence of a researcher-observer in her midst, continued into the field observation phase. Many informal discussions took place with both the teacher and her instructional associate (formerly termed teacher aide). These discussions served two purposes: explicitly, to collect and validate information as interpreted and perceived by the researcher, and more importantly, to establish the credibility and the trustworthiness of the researcher to the teacher-subject. The results of one had impact on the other. As the teacher and instructional associate discussed information resulting from researcher observations, they gained a better understanding of the intent of the study as well as more trust in the researcher's ability to interpret the setting fairly and accurately. As a result, they initiated more interactions and allowed more access to information, which in turn increased the understanding of the researcher, hence allaying their fears of misrepresentation. As more days passed with the researcher in the room and as more interactions occurred, the researcher became more unobtrusive to both children and adults in the classroom. This phase of the study occurred over a period of a month. At its conclusion, the study entered the field observation phase.

Phase 2: Field Observation

Once entry had been established, the researcher began the field observation phase of the study. The objective of this phase of the research was to gather preliminary information about the classroom program, the IEP development process, the child-subject and his classmates, and how/when the teacher planned. This information, gained through observations, interviews, and document analysis, was later useful in assuring that data collection and analysis decisions would be appropriate and feasible.

The context of the setting was observed over a period of six weeks during the final quarter of the school year. The normal stream of classroom activities and the results of informal discussions were documented in field notes. Children were observed as potential subjects, and optimal times and activities for videotaping were identified. Morning planning sessions between teacher and instructional associate were also observed, and relevant documents illustrating teacher plans were collected. Discussions with teachers, parents, and other public school personnel focused upon description and evaluation of the IEP process used by the school district.

A major task of this phase was to determine a way to document the typicality of any one classroom day. Observations and document reviews were conducted to determine what constituted a typical day; these were then compared to similar data collected during the videotaping phase of the study. Details of this attempt to demonstrate how typicality of naturalistic data might be assessed are discussed later in this chapter.

During the final days of the field observation phase, the researcher, teacher, and instructional associate collaborated over the selection of the child-subject, determination of days and times most appropriate for videotaping, and the most feasible placement of the videotape equipment. More focused observations were made of the child-subject, tracking his classroom style, his activities, and his associates. The initial teacher interview to gather data regarding overall goals for both the program and the child was also taped towards the end of the field observation stage.

Once the researcher had an understanding of the classroom program, the teacher's overall goals for the program, and the particular child-subject, the formal field observation phase drew to an end. Observations and informal discussions were continued during the next phases, but at a less systematic pace. Once the child-subject was identified and consent obtained from his parents, and once the interview/videotaping/retrospection schedule was negotiated with the teacher and the instructional associate, the next phase of focused observation was ready to begin.

Phase 3: Focused Observation and Retrospection

The objective of this phase of the research was to gather differential, triangulated data on each of the three plans. Figure 4.1 summarizes the various sources of information which were tapped to describe each of the plans. For the contractual plan, a copy of the written IEP document was obtained; permission to do so was included in the consent form signed by the parents. However, to avoid bias, this document was not analyzed by the researcher until after data from the phenomenological and empirical plans were collected. At the end of the study, an IEP for the forthcoming year became available, and this was added as an unplanned data source. Details of data collection for the contractual plan are provided in Chapter V.

The primary source of data for the phenomenological plan was a series of teacher interviews. Initially, it was intended that morning planning sessions between teacher and instructional associate be taped, but since these were conducted "on the run" by the teacher and

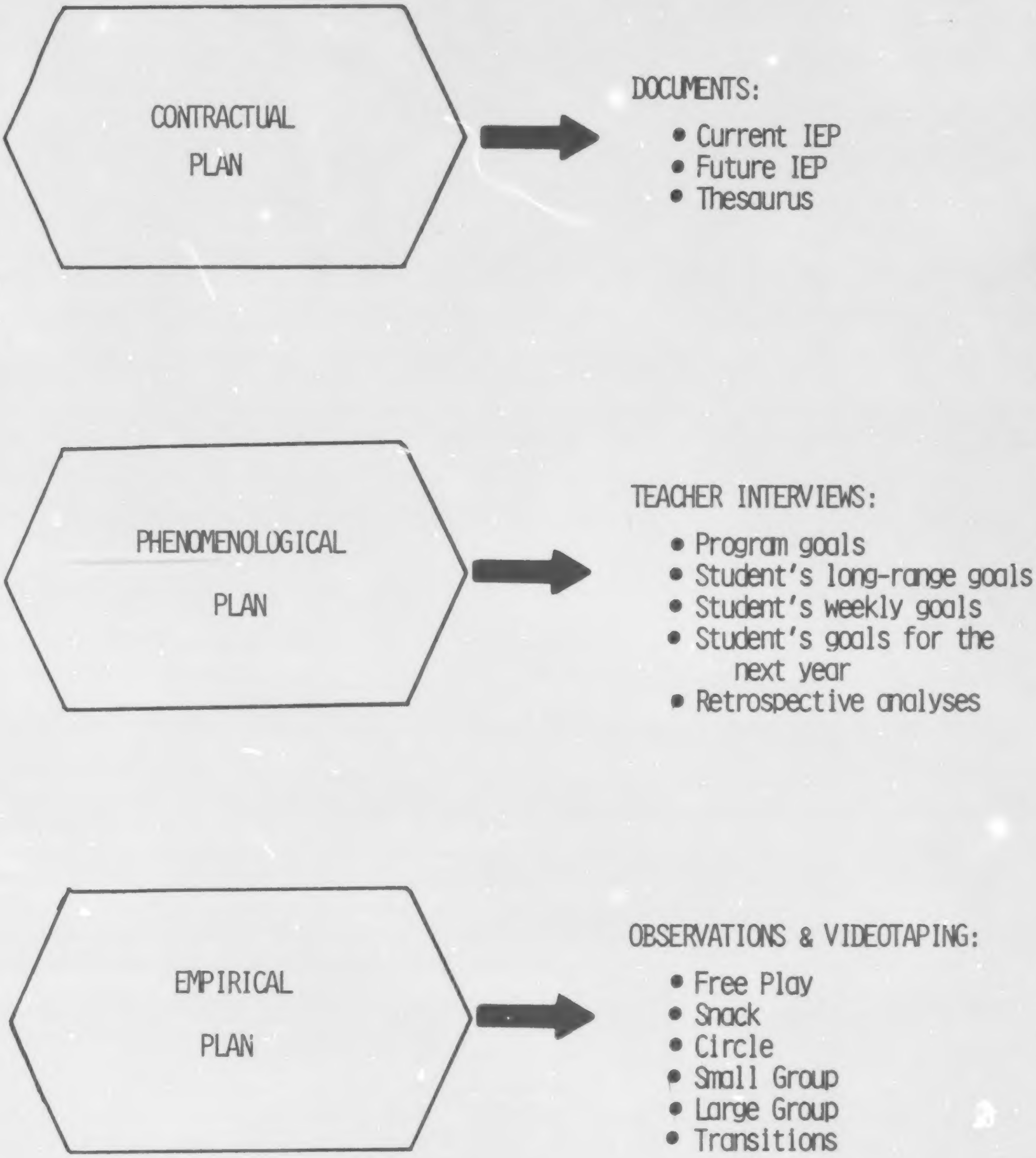
CONTRACTUAL PLAN
DOCUMENTS:
• Current IEP
• Future IEP
• Thesaurus
PHENOMENOLOGICAL PLAN
TEACHER INTERVIEWS:
• Program goals
• Student's long-range goals
• Student's weekly goals
• Student's goals for the next year
• Retrospective analyses
EMPIRICAL PLAN
OBSERVATIONS & VIDEOTAPING:
• Free Play
• Snack
• Circle
• Small Group
• Large Group
• Transitions

Figure 4.1. Sources of information for the three components of individualization.

associate as they readied the classroom for the children, field notes were substituted. The teacher was formally interviewed weekly, prior to each of the three videotaping sessions, for the purpose of gathering information about her intentions for the child's program during that week. These interviews, like the one conducted during the field observation stage, were also audiotaped. Written plans, especially teacher notes for Michael's small group lessons, were gathered to supplement the interview information. Additional interviews followed the teacher's retrospection with the video tapes, and were also taped. At the end of the study, a final interview was added to assess the child's progress during the year and to project objectives for the forthcoming year, in order to elicit some data which could be compared to the future IEP that had been acquired.

The outcome of this aspect of focused observation was a series of six taped interviews which were then transcribed. These contained statements of teacher goals for the program in general and for the child in particular. The transcripts also indicated the weekly objectives that the teacher intended the child to achieve. Finally, the interviews provided information as to the teacher's role in the development of IEPs, and as to how she utilized the child's IEP in her planning. Details of data collection for the phenomenological plan are contained in Chapter VI.

Data collection to describe the empirical plan included capturing the child's stream of behavior via a videotape record. Videotaping was conducted two days a week, over a period of three weeks, for a period of 2 1/2 hours each morning. Three consecutive Tuesday mornings were designated as prime data collection sessions; three consecutive Wednesday mornings served as backup sessions in case of equipment failure, loss of data, or atypical classroom activity. Field notes supplemented the videotaping sessions and were used to flesh out the setting descriptions which accompanied the video record.

One further source of data was employed: both teacher and instructional associate engaged in a process of retrospection to triangulate the video and researcher records. The purpose of retrospection was to allow the teacher to validate and extend the understanding of what had occurred during the morning of the taping session and to elicit examples of teacher intent being implemented and/or thwarted. In the same spirit as the researcher/teacher team of the Smith and Geoffrey study of a high school classroom (1968), the teacher became an intimate of the data collection process by reviewing each videotape following its completion. These commentaries were also audiotaped, transcribed, and integrated into the transcription of the video record.

The video record that resulted from this study of the empirical IEP was developed into a "videoscript," a document that aligned the verbatim transcript of the videotape, setting descriptions based on field notes, and transcriptions of the teachers' retrospective comments. Details of the development of the videoscript and other data collection procedures utilized for the empirical plan are incorporated in Chapter VII.

Phase 4: Analysis and Validation

The process of data analysis was primarily one of developing and implementing strategies to collapse the various transcripts into units that would allow for the matching of contractual objectives, teacher intents, and child behavior. Figure 4.2 outlines the various strategies utilized for each type of plan.

Because of the straightforward nature of the contractual plan, simple document analysis was performed, seeking trends and characteristics about content and structure. The theoretical suppositions of content analysis (Holsti, 1969) and the development of category systems as discussed in Chapter III formed the basis for transforming the teacher interviews into an outline of "intents;" i.e., goals and objectives based on the teacher's mental configuration of their existence and relationship. Thirdly, the videoscript for the empirical plan was unitized to identify child-driven units, called "agendas," which could be matched back to the other two plans. Procedures for these analytic strategies are detailed in the three succeeding chapters.

Validation of data occurred simultaneously. The teacher was asked to review various forms of the collapsed data, especially that from the phenomenological and empirical plans. Various strategies to establish inter-rater agreement were utilized. Journal notes were kept to document emergent themes, both as records of note and as items for further verification.

The four phases of the research plan resulted in findings that were grounded in the data collected. Agendas were matched to objectives, and sorted by a computer-assisted system. Comparisons were made regarding the numbers of objectives attempted or achieved by the child, and patterns regarding their occurrence described. Field and journal notes supplemented the gathered data, and descriptive

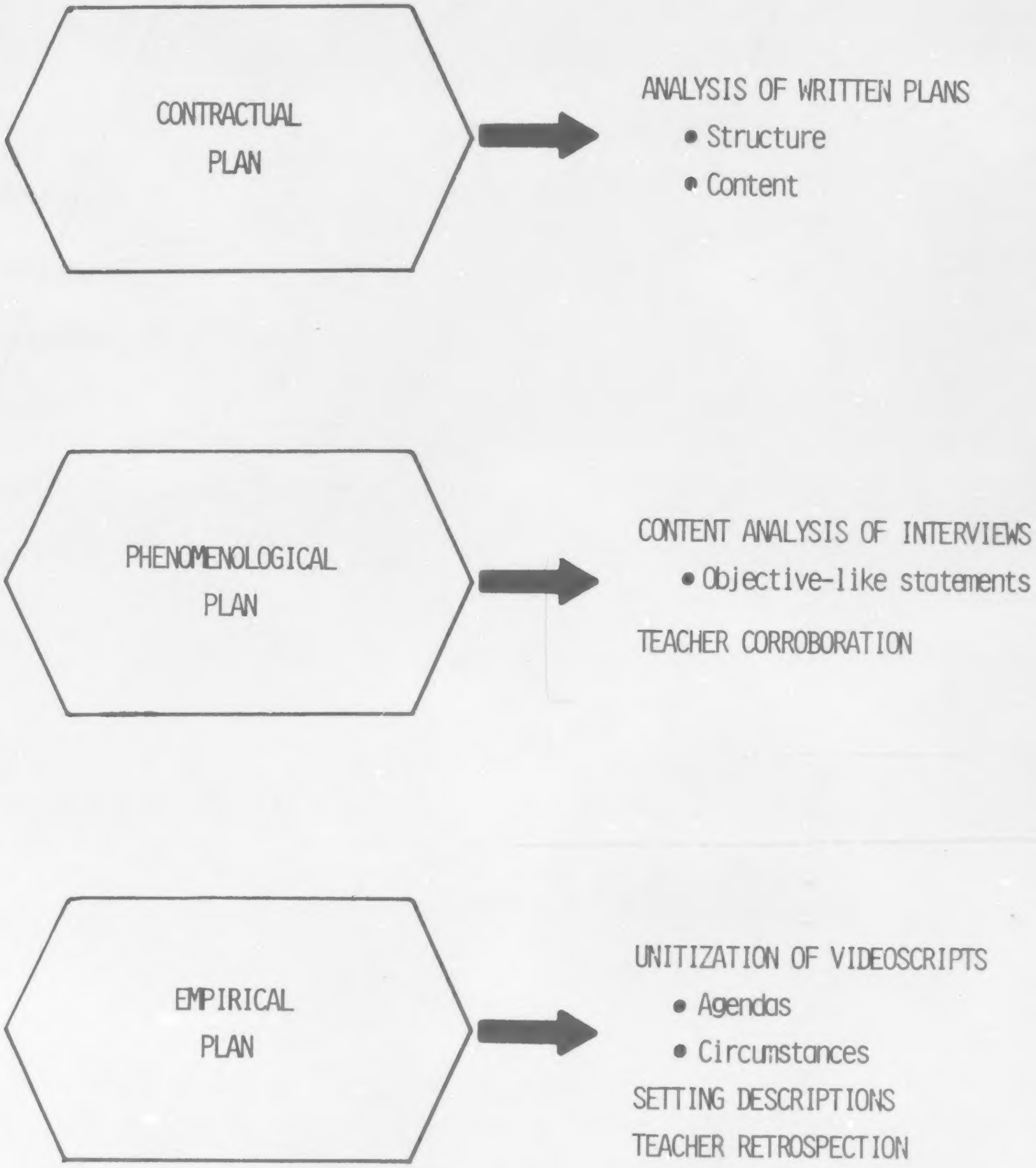
CONTRACTUAL PLAN
ANALYSIS OF WRITTEN PLANS
• Structure
• Content
PHENOMENOLOGICAL PLAN
CONTENT ANALYSIS OF INTERVIEWS
• Objective-like statements
TEACHER CORROBORATION
EMPIRICAL PLAN
UNITIZATION OF VIDEOSCRIPTS
• Agendas
• Circumstances
SETTING DESCRIPTIONS
TEACHER RETROSPECTION

Figure 4.2. Strategies utilized in the analysis of the three components of individualization.

statistics were the basis of the quantitative results presented. Again, details of these processes can be found in succeeding chapters. The findings were validated with the teacher-subject as a "member check" (Guba, 1978); additionally, both the teacher-subject and a preschool program administrator reviewed the final research report for accuracy and completeness of both facts and interpretations.

Description of the Setting

The setting selected for this investigation was a classroom within a multi-categorical preschool program, which had been established as a joint venture of a local special education cooperative, a university affiliated facility, and the state education agency. Funded through the Bureau for the Education of the Handicapped, Division of Handicapped Children's Early Education Program, the program was a state model for providing services to handicapped preschoolers within a public school setting. The program was termed multi-categorical because it served children with different types of handicapping conditions.

The multi-categorical preschool maintained many of the characteristics of public school programs. It was located within a large elementary school in the local school district, and integrative experiences between preschool and other children took place within the day-to-day program: the preschool children played on the public school playground, ate in the school cafeteria, and attended music and library classes with non-handicapped children.

As a public school program, all the operating procedures of the local school district were in effect for the preschool as well. The program operated according to the schedule of the public elementary school; the children attended school five days a week from 8:00 a.m. to 3:00 p.m., and followed the same yearly calendar as the entire school system. The preschool teachers identified themselves as public school personnel, and were contracted as such. Related services available to the public school program were likewise available to the children in the preschool; these included the services of a physical therapist, an occupational therapist, a speech/language therapist, a social worker, a school psychologist, and a nurse, all members of the school district staff. Public school transportation was also a part of the program.

Most importantly, the process used to develop IEPs for children in need of special education services was one and the same for both preschool and public school children. Procedures, forms, and policies utilized in the preschool for IEP development, implementation, and review were public school procedures, forms, and policies. The preschool program was administered through the office of the local director of special education.

The unique characteristics of the model program were then added on to the public school delivery model. These included the participation of a "normal peer model" with handicapped children, the utilization of the classroom for training and demonstration, and the dissemination of various program components. Aside from these, the research setting could be considered characteristic of typical public school special education classrooms.

Ten children, a teacher, and an instructional associate comprised the classroom under investigation. The children ranged in age from three to five years, and, except for the normal peer model, had various physical and mental handicaps which ranged from the more severe-profound categories to mild, "at risk" ones: two of the children were blind, one was severely retarded, four were moderately to mildly retarded, one had cerebral palsy, and another had emotional problems. Related service personnel worked with individual children at various, scheduled times during the week, often right in the classroom. Practicum students and volunteers were occasionally present in the mornings; a student teacher was present two afternoons a week.

The program of the classroom was fairly academically-oriented, and structured in a variety of ways, varying from large group instructional modes to informal play periods. The schedule for a typical classroom day included:

8:15	Children's arrivals; free play
8:45	Snack and juice (whole group)
9:00	Circle Time (whole group): activities included songs, finger plays, talking about activities for the day, and other conversations and activities to encourage language and participation.
9:30	Small Group Time: activities included working with puzzles, shapes, crayons, pencils, and manipulative materials to help improve perceptual and fine motor skills and eye-hand coordination.
10:00	Gross Motor Time (whole group): included outdoor play, using large muscle equipment in the classroom or in the gym.
10:30	Large Group Time: activities included the practice of self-help, language, and listening skills.
11:15	Lunch in the elementary school cafeteria.

12:00	Play Time, inside or outside when appropriate
12:30	Nap and adaptive physical education groups
1:30	Afternoon Activities: including music, art, and films as well as individual completion of work from the morning.
2:00	Snack and Free Play
2:45	Preparation for dismissal

While all parts of the schedule were observed during the field observation phase, mornings were designated as actual data collection times, primarily because the variety of types of activities which occurred allowed for more objectives from the IEP to be observed, and because of the structure. The afternoons were more variable and atypical, with naps and art activities comprising a major portion of the time. Five particular morning settings were selected for videotaping. These included Free Play, Snack, Circle, Small Group, and Large Group.

The teacher recommended Tuesdays as the prime days for data collection, because fewer related service personnel worked with children on that day, and because children were best adjusted to the schedule on that day (i.e., Monday following the weekend required reorientation; by the end of the week, the children were more tired). Wednesday was selected as a back-up day for data collection for similar yet not as strong reasons.

The classroom was organized into various activity areas, as illustrated in Figure 4.3. Materials were placed on tables and shelves for easy access by the children. There were also two bathrooms in the

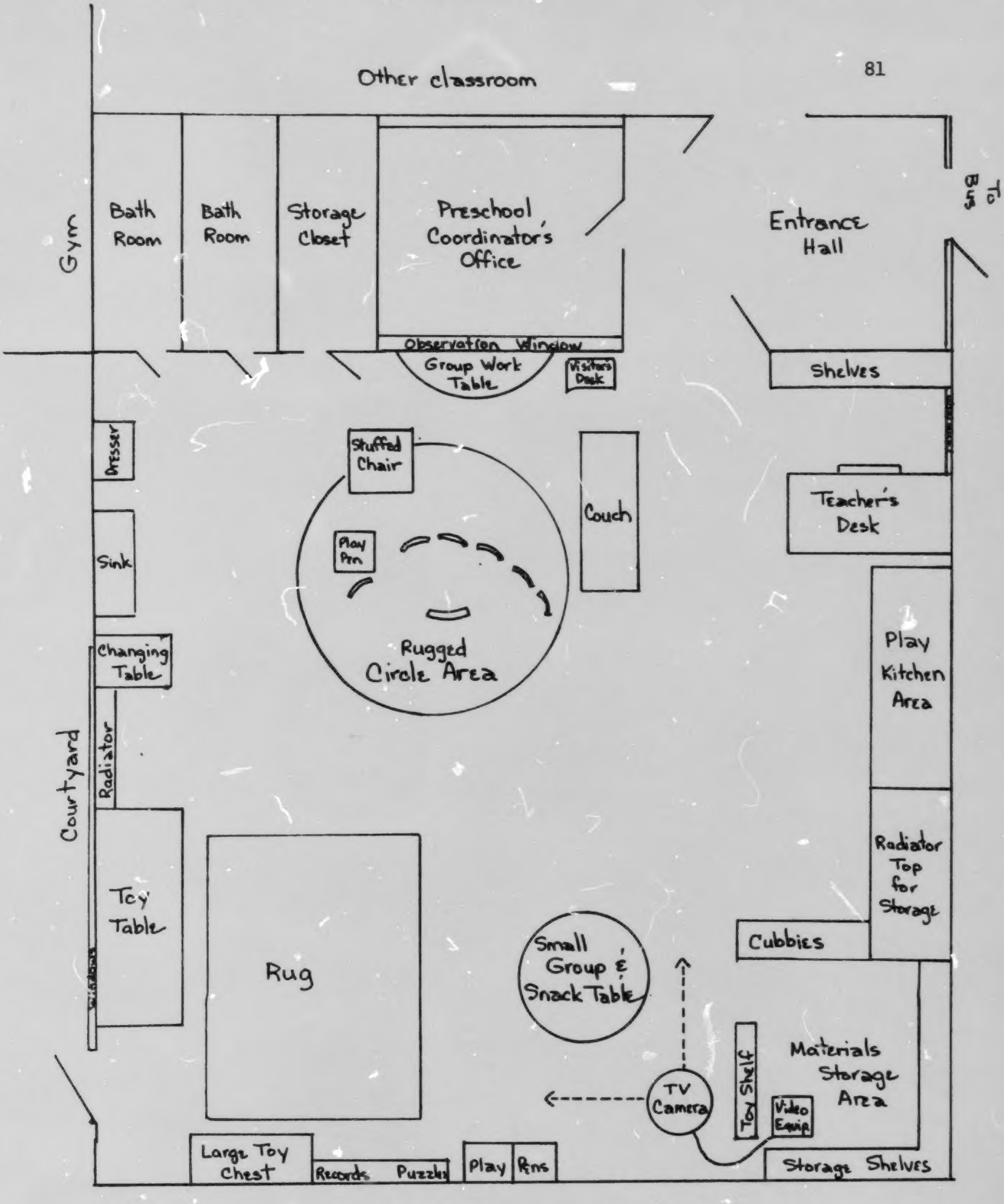
Other classroom
Gym
Bath Room
Bath Room
Storage Closet
Preschool Coordinator's Office
Entrance Hall
Observation Window
Group Work Table
Visitor's Desk
Shelves
Dresser
Stuffed Chair
Couch
Teacher's Desk
Sink
Play Pen
Rugged Circle Area
Play Kitchen Area
Changing Table
Radiator
Courtyard
Windows
Toy Table
Rug
Radiator Top for Storage
Cubbies
Small Group & Snack Table
TV Camera
Toy Shelf
Video Equip.
Materials Storage Area
Large Toy Chest
Records
Puzzles
Play
Pens
Storage Shelves

Figure 4.3. The classroom research site.

room, and a kitchen-type sink for teachers' use. There were two entrances, one used by the children to enter and exit from the bus area; another, to access a small courtyard and the gym. One area of the room was blocked off as a storage area, and was "off-limits" to children. The video equipment was placed within this enclosure, and the camera just outside of it. This location provided visual access to all parts of the room for filming.

Assessing Typicality

Opinion is divided on the issue of whether the naturalistic study of a single case is scientifically profitable. Brophy (1979b) placed case studies at the extreme of inquiry which cannot be generalized because of its unique nature and the unique perspective of a single observer. Guba and Lincoln (1981) cite other alternatives that have been posed to determine whether, in a naturalistic study, a particular "'slice of life' is representative of other 'slices of life'" (p. 116). Investigators of one ilk think it impossible to generalize since circumstances change so rapidly; they leave it to the reader to determine applicability. Another group of investigators attempt to meet scientific criteria and offer evidence on the degree to which their samples of behavior are representative of a population of interest, an approach Guba and Lincoln (1981) believe should be utilized whenever possible, but which is only a substitute for the essentially unanswerable question of how good a sample of the population is being dealt with.

Guba and Lincoln (1981) are most in concert with the group whose argument is based on Cronbach's assertion that generalizations decay, and therefore should only be considered working hypotheses which will be described and interpreted anew in each new setting, taking into account its unique characteristics. For naturalistic research, they prefer the term "fittingness" rather than generalization; unlike generalization, fittingness implies the effect of context: the question becomes one of presenting "working hypotheses that fit more or less well into a context other than the one in which they were derived" (p. 118). This calls for extensive and rich descriptions, filled with contextual information and interpretations so that both the originating and receiving contexts can be assessed for degree of fit. This latter concept of fittingness seemed most appropriate to the task at hand, although there is need to develop techniques for systematically describing variable contexts. One of the outcomes of this study was the opportunity to explore some possible alternatives to developing rich descriptions as a means of demonstrating fittingness.

The very nature of naturalistic research assures that it is internally valid; that lack of a priori controls allows for isomorphism between the real world and the observed setting. In this study, attention was given to the provision of information about the classroom, the teacher, and the child to illustrate similarity to other public school, early special education programs for mildly handicapped children. However, in the investigation of the empirical plan, not only was it necessary to provide evidence that the classroom segments were typical of other classrooms, but also that the sample of behavior/days selected for videotaping was typical of the repertoire of that particular classroom and teacher. The utilization of techniques adapted from ecological psychology proved useful in this endeavor.

Bronfenbrenner's (1979) conceptualization of the environment provided a starting point. Contrary to prevailing research models which restrict the understanding of environmental context, Bronfenbrenner analyzed the environment in systems terms; he saw it composed of nested, interrelated settings that affect psychological growth both directly and indirectly. His basic unit of reciprocal interaction was a two-person system, the dyad, characterized by the immediate situation directly affecting the person, the objects responded to, or the persons engaged on a face-to-face basis. He referred to this immediate setting of complex interrelationships as the microsystem. Linkages between settings constituted mesosystems, and overarching patterns of ideology and organization were considered macrosystems. Consideration of the linkages both within and between settings enabled Bronfenbrenner to view development, research, and social policy through a new paradigm. His conceptualization also provided a stimulus for the analysis of fittingness of classroom settings, though from a viewpoint much narrower than his original intent.

To say that a classroom day is typical or that one classroom setting fits another is far too simplistic, perhaps even inappropriate. Within any day or any program, there are many and varied activities, expectations, personnel groupings, and materials, so much so that to attempt to describe them en masse presents too limited or too dichotomous a picture. Bronfenbrenner's notions of nested systems allow analysis of the classroom day from multiple levels that can be scrutinized to more appropriately determine typicality or fittingness.

The overarching patterns and organization common to the preschool culture formed a macrosystem of sort. Its critical features were a time-bound structure, a set of personnel holding differential roles, and a sequence of activities, each with their own standing pattern of behavior. The function of this microsystem, as indicated by the analysis of teacher intent, was to create a place for learning the rules of the social institution called school, and particularly for the preschool classroom observed, for developing a sense of group cohesiveness and sensitivity to others.

In specifics, the preschool was a culture that existed from 8:30 a.m. to 3:00 p.m., and included two principal teachers, and ten children. The teacher was in authority, assisted by her instructional associate. Other staff, practicum students, and volunteers were periodic members of the setting. The children were close in age, but their physical and mental characteristics made them a widely varied group, from immobile to active, from speechless to talkative, from sightless to seeing, from passive to exploratory. All were present each day, although two children always arrived later than the others, during Circle Time. The day passed through a nearly invariant progression of activities, beginning with Free Play, and moving through Snack, Circle, Small Group, Gross Motor Time, Large Group, and Lunch during the morning. Together, these features of time, personnel, materials, and events, along with their concommitant roles and standing patterns of behavior, and consistent with the nested systems within it, constituted the macrosystem. In many depictions presenting evidence for fittingness, the level of description is limited to the macrosystem. Bronfenbrenner's additional definitions of nested systems, tied with ecological psychologists' tools for the analysis of behavior settings, allow us to go further.

Bronfenbrenner (1979) defined the mesosystem as one which "comprises the interrelations among two or more settings in which the developing person actively participates" (p. 25). In this study, it was hypothesized that the various activity settings of the preschool day could be considered the mesosystem, and that each were independent behavior settings, according to the ecological definition set forth in Barker and Wright (1971). Barker's K-21 scale for determining interdependence of behavior settings served as a means for describing critical features of those settings for comparative purposes. The immediate need was to determine whether the days and activities selected for videotaping were typical of the classroom's history and hence, an appropriate "sample;" a larger purpose was to describe the originating context in enough detail so that "fit" to a future, destination context could be assessed, as proposed by Guba and Lincoln (1981). The use of Barker's structural test and K-21 scale were tentatively explored as tools for both.

Barker's classic definition of a behavior setting is "a standing pattern of behavior and a part of the milieu which are synomorphic and in which the milieu is circumjacent to the behavior" (Barker & Wright, 1971, p. 45). In essence, behavior settings are empirical phenomena which include both a standing or expected pattern of behavior and the associated milieu; thus, the physical school playground is not a behavior setting without its associated behavior. In line with Bronfenbrenner's conception of mesosystems, Barker characterized settings as constituting "a network of interconnected systems" (p.

51); as such, they can be described and enumerated.

To assure that tentatively-identified settings met his definitional criteria, Barker proposed a structural test. This test served as a useful comparative tool to illustrate how the videotaped activities of the preschool classroom were similar to those observed historically over the three months of field work. In both sets of comparisons, the results of the structural test were similar; the videotaped activities maintained the same features of those that had been observed earlier in the year. The structural characteristics of each of the potential settings, based on the components of Barker's definition of a behavior setting, are given below as examples of the application of the structural test:

Free Play

1. Time:	8:30 - 8:45 each morning
2. Place:	Entire classroom available
3. Personnel:	Up to 8 children; teacher and instructional associate; related services staff in and out
4. Object Props:	Instructional games, mobile toys on table, big wheel, scooters, kitchen equipment and utensils, books, rugs, couch, tables and chairs
5. Boundary:	4 walls of the classroom, doorways to entrance hall and playground
6. Behavior Anchored:	Teacher brings/calls children back if they go beyond boundaries
7. Standing Pattern of Behavior:	Children arrive, greet teacher(s), and choose an independent activity; conversations with children and teachers; teachers prepare classroom for days' activities or discuss plans among themselves

8. Behavior/Milieu Synomorphic:	Toys and equipment are placed around classroom to be played with or used; teachers encourage or reprimand children to play appropriately and/or independently
9. Behavior/Milieu Circumjacent:	Children enter room and begin play and conversation

Snack

1. Time:	8:45 - 9:00 each morning
2. Place:	Around snack table in one area of the room
3. Personnel:	Up to 8 children; teacher and instructional associate; occasionally, speech therapist or student volunteer
4. Object Props:	Crackers, cookies, or similar food, sometimes frosting and knife; juice bottle/can, glasses, special tube-glass, table, chairs, special chair, communication board
5. Boundary:	Table and space for chairs around it
6. Behavior Anchored:	The only place in the room where eating occurs or is allowed
7. Standing Pattern of Behavior:	Eating and drinking, sitting, conversing
8. Behavior/Mileu Synomorphic:	Objects used for eating and drinking; table arrangement encourages group conversation and shared leadership
9. Behavior/Milieu Circumjacent:	Children enter the setting to eat and begin "Snack time" behavior

Circle

1.	Circle:	9:00 - 9:30 each morning
2.	Place:	Semi-circle of chairs set up on a particular rug
3.	Personnel:	8 children to begin, 2 arrive later; teacher and instructional associate; occasional student volunteer
4.	Object Props:	Chairs, bean bag chair, teacher's tub of materials for finger plays, songs, or discussion (e.g., monkeys, old shoe, scarves, animal pictures, hats, eye glasses)
5.	Boundary:	Area of rug bounded by children's chair backs and back of teacher's chair
6.	Behavior Anchored:	The only place in the room where this occurs; children select a chair and wait for others to arrive before starting
7.	Standing Pattern of Behavior:	Children sit and respond to teacher-leader; begin and end with special songs; speak in turn (raise hands); sing or say songs, poems, and fingerplays
8.	Behavior/Milieu Synomorphic:	Children sit in chairs facing teacher; materials box placed next to teacher's chair; teacher encourages participation and reprimands children leaving their chairs
9.	Behavior/Milieu Circumjacent:	Setting doesn't begin or continue until all children and teachers are seated in chairs

Small Group

1.	Time:	9:30 - 10:00 each morning
2.	Place:	Around a particular table in one spot of the room

3. Personnel: 4 children; either teacher or instructional associate

4. Object Props: Table, chairs, tub of instructional materials (e.g., puzzles, clips, folders with paper and pencil, pegboards, texture cans, wooden numerals), crayons, scissors, paste

5. Boundary: Table and space for chairs around it

6. Behavior Anchored: The only place in the room where this group meets; children reprimanded for leaving seats

7. Standing Pattern of Behavior: Listen to instructions from teacher-leader, raise hands to participate, complete a task as assigned

8. Behavior/Milieu Synomorphic: Children sit facing teacher; chairs are placed at table; materials placed in front of each child; children work with work materials

9. Behavior/Milieu Circumjacent: Setting doesn't begin or continue until all children are seated at table

Large Group

1. Time: 10:30 - 11:00 each morning

2. Place: On the large rug or the Circle rug, around the Snack table, or in front of the record table

3. Personnel: All 10 children; teacher and instructional associate; occasionally other related service personnel or student volunteers

4. Object Props: Self-help materials (e.g., vests, boards for tying, lacing, snapping, buttoning), blankets for folding, table utensils, books, record player, flannel board, chairs,

	table; water, beans or sand for pouring
5. Boundary:	Although place in the room varies, the teacher indicates the boundary verbally as the edge of the rugs, chairs, etc.
6. Boundary Anchored:	Children reprimanded if they move beyond designated boundary
7. Standing Pattern of Behavior:	Children face teacher-leader and carry out designated tasks; raise hands to participate; materials distributed to each child:
8. Behavior /Milieu Synomorphic:	Children use the materials to practice self-help or language skills
9. Behavior/Milieu Circumjacent:	Children enter room from playtime and go to designated area of room to await start of the activity

A second ecological tool was utilized to compare the sampled settings to the history of the classroom program. Barker assumed that the greater degree that settings involved the same people, places, times, and actions, the greater their interdependence or sameness. He developed the K-test of Interdependency as a method of testing the degree of independence between two settings; a score of less than 21 signified that two settings were so interdependent that they ought to be considered as one (Barker & Wright, 1971). While this traditional use of the K-test verified the presence of certain independent settings in the classroom, in this study its use was more valuable as a tool for comparing "typical" classroom settings to those settings "sampled" for the videotaped sessions.

The K-test of the interdependency of two settings is based on the degree to which:

1. the same *people* enter both settings;
2. the same *leaders* are active in both settings;
3. the same or nearly the same *physical spaces* are used in both settings;
4. both settings occur at the same or near together *times*;
5. both settings use the same or similar *objects*;
6. the same *molar actions* span the two settings; and
7. the same kinds of *behavior mechanisms* occur in both settings (Barker & Wright, 1971, p. 65).

Each criterion is rated on a scale of one to seven (Barker & Wright, 1971, Appendix 5); K-scores can therefore range from 7 to 49. Any settings which obtain a score of 21 or greater are considered distinct settings.

Potential settings were rated independently during both the field observation stage and following the three days of videotaping. Table 4.1 illustrates the similarity of the K-values for each set of comparisons.

Table 4.1
Comparative K-test Ratings of Classroom Behavior Settings

Compared Settings	K-value during Field Observation	K-value during Videotaping
Free Play vs. Snack	19	19
Snack vs. Circle	25	25
Circle vs. Small Group	25	25
Small Group vs. Snack	22	22
Large Group vs. Circle	19	19

The resultant K-values indicated that the days sampled were similar in behavior, personnel, time, objects, and space to days observed during the six weeks of field observations. Additionally, across both sets of observations, there appeared to be high interdependence between Free Play and Snack and between Large Group and Circle, indicating that across time, neither were unique behavior settings.

Finally, an analysis of the microsystem served as still another means of assessing typicality. Bronfenbrenner (1979) defined the microsystem as "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (p. 22). In the classroom, one example of a microsystem was selected for illustrative purposes.

Characteristics of Small Group have already been described in terms of the analysis for the structural test (see pages 87-91). In this setting, five students worked with a teacher, following directions on various, specified learning tasks. Each day, the teacher listed in her plans the types of activities she intended the group to accomplish; these lists, from three months prior, provided a basis for tracking the history of that group's activities. The historical activities were sorted until a typology emerged, and analyzed for frequency of occurrence and measures of central tendency. Then, the activities which occurred on the three videotaping days were sorted into the existing typology. To the degree that the newer activities matched the typology of the three prior months, the more confidence one might have in assessing the extent to which the videotaped Small Group sessions were typical of that classroom.

The history of Small Group showed that over 49 days, a typical session included an average of 6.4 learning activities, the mode being six. Fifteen different classes of activities were identified as common to Small Group, and the frequency of their occurrence over the 49 days is shown in Table 4.2. Given this history, a Small Group could be considered typical if it contained about six activities which primarily fell into one of the fifteen categories, allowing for some occasional new ones given the changing needs of the children. One would expect most of the activities to follow the previous patterns, allowing for some changes of emphasis, again to account for changes in the children's learning from the prior three months. These patterns included an emphasis on tracing, identifying objects, assembly activities, fine motor, eye-hand coordination activities, art activities, and puzzles.

Table 4.2
Comparative Occurrences of Activities
in Small Group Behavior Settings Across Time

Type of Activity	% Days Historical Occurrence N = 49	No. Days Videotape Occurrence N = 3
Trace/Copy (shapes, letters, etc.)	76%	2
Identify (colors, numbers, shapes, etc.)	63%	2
Assemble (Nuts 'n Bolts, Lego's, etc.)	61%	1
Fine Motor/Eye-Hand Coordination (folding, pasting, cutting, etc.)	55%	3
Art (paint, draw, clay, etc.)	49%	-
Puzzles	45%	1
Opposites	41%	-
Sequence	37%	-
Draw-a-man/Missing parts	24%	-
Count	22%	-
Concept papers (before/after, same/different, etc.)	16%	1
Sort	12%	1
Games of reason	12%	-
Top/Bottom of paper	10%	-
Textures	10%	1
Name/Address	4%	-
Right/Left hand	2%	2

Table 4.2 shows that, as before, the most frequent type of activities during the videotaping were those expected as a result of constructing a typology from the three prior months of activities. An average of 5.7 activities occurred on a videotaping day, with six being the mode. While some activities were not observed during videotaping (e.g., games of reason, paint/draw/clay, or opposites), only one new one was added, that of a commercially-prepared card designed to develop matching skills. In addition, there was increased emphasis on identifying right and left hand during the days observed. In sum, the characteristic activities found in one of the microsystems during videotaping could be considered similar to those of prior months, as were the roles and relationships of the subjects. The additional activities could be accounted for in terms of movement of the group through the curriculum over time.

Therefore, by adapting Bronfenbrenner's multi-level interpretation of the environment and Barker's methods of rating behavior setting structures, an attempt was made to develop alternative ways of providing rich descriptions of settings so that their fit to future contexts might be assessed. A second outcome of the application of these procedures, critical to this particular design, was to illustrate alternative means for indicating typicality within a single case, using a naturalistic methodology. The interpretation of the results reported in subsequent chapters is stronger to the degree both these tasks were demonstrated to be viable and valid.

Selection of the Subjects

The study demanded two subjects: a teacher-subject and a child-subject. Criteria and procedures for selection of the teacher-subject have been previously described (see pages 66-67).

The Teacher-Subject

The teacher-subject was a public school teacher certified in elementary and special education, holding a Masters degree in elementary education and 21 graduate credit hours in special education. She had taught for nearly 10 years in classrooms for slow learning inner city children, regular education primary children, moderately handicapped children, and preschoolers. Prior to her assignment to the multi-categorical preschool, she had been employed by the public schools to teach in a preschool program in a community mental retardation agency for six years. She met the criteria of excellence and experience, and she was a reflective teacher, who thought about her program and its impact on individual children.

The child-subject was not selected until near the end of the field observation phase. A subject pool of nine children was available, the normal peer model being excluded for lack of an IEP developed through the formal, contractual process. A systematic process was designed to select an appropriate child-subject for the study.

A scaling instrument, the Subject Appropriateness Scale, was developed to ascertain the appropriateness of the various children for selection as the research subject, and was completed by the teacher, instructional associate, and researcher, each independent of the other (see Appendix A). Criteria for selection were based on concerns that the child be one who could be understood, who was an active participant in the daily program, who would not be distracted by the equipment, and who would be less apt to be absent on the critical videotaping days.

The Scale reflected these concerns, and each of the nine children were ranked on each of the following items:

1. Ability to move about unassisted
2. Verbal ability
3. Capability of others to understand his/her speech
4. Ability to be desensitized to the video equipment
5. Length of time present during the classroom day
6. Frequency of absences

The three independent rankings for each item were tallied and averaged. The children's ranks on each of the criteria were then averaged, and an overall ranking of the children most appropriate as subjects was ascertained.

The program administrator was then asked to evaluate the IEPs of the five most-highly ranked children. The instrument developed for this evaluation was adapted from the criteria used in the Pyecha (1979) study to evaluate IEPs; a copy can be found in Appendix B. The primary goal of the evaluation was to identify the areas for which objectives had been developed for each of the children; it was more desirable to select a child whose objectives were observable during the morning settings and in the classroom. If a child had primarily gross motor or physical development objectives, for instance, observation during gym and/or playground activities would be necessary, and these places were not accessible because of the utilization of stationary video equipment. The results of the IEP evaluation indicated that each of the children's IEPs contained objectives in a variety of areas, so this procedure provided no additional further information by which to differentiate the potential subjects, and served to support their overall appropriateness.

Given the data that were collected, the teacher, instructional associate, and researcher conferred over the choices available. The third-ranked child was eliminated because of concerns over his behavior and ability to desensitize. While each of the remaining children was verbal, fairly easily understood, active, and thought to be able to desensitize, the group concurred that efforts to solicit consent be attempted first with the child who had emerged at the top of the Scale, named Michael. The second and fifth-ranked children generally arrived after Circle time had begun, due to their bus schedules, and the fourth-ranked child spent some time with related services personnel on Tuesdays.

The teacher met with Michael's parents and explained the study and the contents of the consent form to them. They agreed to allow their son to participate in the study as the child-subject and to release his IEP to the researcher. While all children had signed blanket releases to be photographed as part of their entry into the model program, an additional letter explaining the study and requesting specific consent was sent to all parents. Copies of the two forms of the consent letter, one for Michael and one for the other children, have been included in Appendix C.

Michael, the Child-Subject

Michael was a five-year old who had come to the preschool when he was 4 1/2 years old. Prior to this, he had been enrolled in a Head Start program. His transfer to the multi-categorical preschool was based on the need to provide him with full day services in a structured program, where he could receive more intensive speech and language intervention. He was considered slightly delayed in language and conceptual learning ability, which resulted in a communication handicap. However, this was felt to be environmentally rather than organically induced, due to lack of stimulation in his home environment. He was also small in stature as compared to other age peers. and had been diagnosed as having congenital growth retardation. Other developmental areas appeared to be normal. While in the preschool program, he received speech and language therapy on a regular basis, along with adaptive physical education instruction. By the spring of the year, when data were collected, he was being considered for mainstreaming in a regular kindergarten program the subsequent fall.

From observations of Michael and from teacher reports, it was apparent that Michael was highly motivated by school. He would enter the classroom in the morning, and immediately engage in some activity. Many times, he would talk to one of his teachers, or follow them around as they went about their preparations for the day. At the beginning of field observation, he interacted most frequently with the boy who was the normal peer model, usually playing with toy trucks and cars. Later, as it appeared that the normal peer "outgrew" Michael's company and played more often by himself, Michael befriended one of the other girls from his Small Group and frequently played with her. Despite her more boisterous manner, he began to take on a leadership role in this dyad, something he had not done before in his interactions with the normal model. His other friends included a girl with cerebral palsy, who was just beginning to crawl. Michael enjoyed "helping" her, and was often very protective of her. Except for this girl, Michael interacted primarily with the children who were members of his Small Group.

During other classroom activities, Michael was very attentive and involved in them. He participated, answered questions, and anticipated next events, often being the first of a group to be seated. He would frequently ask, "What's for lunch?" or "What we going to do now?" He was a very compliant child and rarely caused anyone to reprimand him. He seemed to enjoy school and moved about with ease in the daily activities of the preschool.

Summary

In this chapter, an overview of the research plan was presented in terms of its four phases: entry, field observation, focused observation, and data analysis. In addition, the setting was analyzed from a multi-level perspective, utilizing conceptions and tools from ecological psychology, to provide the reader with information with which to assess typicality. Finally, background information on both the teacher-subject and the child-subject was furnished. In each of the next three chapters, more detailed information regarding the data collection and analysis procedures which were utilized to explicate each component of individualization is furnished. Results of each analysis are also presented and discussed in the respective chapters.

CHAPTER V

THE CONTRACTUAL PLAN:
DATA COLLECTION, ANALYSIS, RESULTS

In this chapter, the written document which emerged from meetings of school personnel and parents as the child-subject's IEP will be discussed. Referred to as the contractual plan, its intent was to specify the objectives that were to be accomplished by Michael during the year, as agreed to by the IEP meeting participants. Data collection and analysis for this component were fairly clear-cut: copies of the IEP and other relevant materials had to be obtained, and a document review was conducted to discern structural and substantive patterns. The specific procedures utilized in data collection and analysis are described in this chapter, followed by presentation and discussion of results.

Data Collection

Data collection included obtaining access to a copy of the child-subject's IEP and identifying the procedures by which it was developed. The former was accomplished as a condition for accepting Michael as the child-subject; once parental consent was given, a copy of Michael's IEP was provided to the researcher. For the latter, information was elicited from the teacher in interviews and discussions regarding the procedures utilized to develop the IEPs; she provided descriptions about the case conference process, the participants and their roles in the meeting, and school policies governing the process. Additional informal interviews of other public school personnel and administrators of the preschool program supplemented the information provided by the teacher. A copy of the Thesaurus of Instructional Objectives for Individualized Educational Programs (Monroe Joint Special Education Cooperative, 1980), a data bank of objectives compiled by the school district for use in the development of IEPs, was also acquired. In all, three IEPs were analyzed as data representing the contractual plan: the IEP developed at the onset of Michael's entry into the preschool program, a revised IEP developed in November, and the IEP developed at the end of the year for Michael's program during the subsequent school year.

Analysis of the Contractual Plan

Michael's IEP for the school year under study was developed in October, when he was to be transferred from a local Head Start program to the preschool program. Present at that IEP meeting were his Head Start teacher and two Head Start consultants, the receiving teacher from the preschool (the teacher-subject), the Preschool Coordinator, the public school Coordinator of Elementary Special Education, a social worker, a psychologist from the public school, and Michael's mother. The planning committee used the Thesaurus of Instructional Objectives as a resource for developing the IEP. The Thesaurus was a printed document which listed objectives in a variety of subject matter areas, and which was used by all IEP teams in the school district to construct IEPs; a special section of early childhood skills was also included. From the early childhood section of the Thesaurus, the committee included 31 objectives on Michael's IEP for the forthcoming school year. The IEP which they agreed upon can be found in Appendix D.

Once his IEP was developed, Michael entered the preschool program. However, by December, his teacher had determined that he had achieved most of the objectives:

> . . . the objectives which were written on his IEP --- we worked on a lot of other things, but on those I was really zeroing in on --- he accomplished so quickly that they really weren't very valid objectives. They were too easy. Identifying one color --- that type of thing --- one shape.

In her analysis of the IEP, the teacher considered 14 of the objectives to be 100% accomplished, six more completed at a level of 80%-85%, and four others at 60-75%; she considered only seven to be not achieved, primarily those in the language area. Her explanation for how this state of affairs came about was related to her perception of the limitations of her role at the initial IEP meeting:

> I was a member of that committee as a receiving teacher, but I didn't know Michael. I really was more of an observer. The people who helped write the IEP were his former teachers, that type of person --- it was based on their concept. It's really hard because here you have a committee made up of his teacher who doesn't know our system because she's a Head Start teacher, and a receiving teacher who knows the Thesaurus, but not the child.

Consequently, Michael's teacher developed another IEP which was approved in a meeting with his mother and the Preschool Coordinator in December (see Appendix E). This IEP included 74 objectives, taken from the Thesaurus as well as from several other preschool assessment scales (Brigance, 1978; Indiana Home Teaching System, 1976). The two IEPs were reconciled to derive the contractual plan which was utilized in this study. The process of reconciliation is described in Appendix F; a copy of the reconciled IEP can also be found there.

The analytic procedures utilized for the contractual plan were relatively straightforward and simple. The document was analyzed to identify patterns of structure and content; frequencies of objectives were calculated to illustrate areas of emphasis in quantitative forms. Similar procedures were followed for the IEP developed at the end of the school year under study, termed the future IEP.

Results

Michael's IEP was three pages long and contained most of the component parts specified in the regulations for Public Law 94-142. The cover page listed identifying information, the case conference participants, IEP beginning and exit dates, program implementors, and specification of educational services to be provided, including participation in regular education classes and programs. On the remaining two pages, various curricular categories of objectives were listed, both in terms of present level of performance and objectives for the forthcoming year. There was no differentiation between annual goals and short-term instructional objectives on the IEP form. The statements of evaluation covered the overall set of objectives, and indicated that criterion and diagnostic tests would be periodically administered to assess current level of performance and to serve as a basis for evaluation.

The Thesaurus indicated that the IEP was to include statements of annual goals and short-term objectives, in compliance with the legislation, and an attempt was made to differentiate the two in that document:

> Annual goals are not specific --- they are broad mission statements of where the Committee would

> like the student to end up by the IEP exit date. An example of a long range of annual goal in math might be:
>
> > The student will improve basic skills in the area of mathematics.
>
> Short term objectives differ from annual goals in that they are specific, observable, and teachable. They state specifically how an annual goal will be accomplished. (p. v).

On the IEP form, there was neither a place for annual goals to be written, nor were any added. All that appeared were the major categories within which Michael was to accomplish certain skills; therefore, it was assumed that the Committee considered that important goals for Michael were to improve his skills in the areas of Language and Cognitive Development, Self Help, Social Development, and Motor Development.

Within each of those areas, the short term objectives were specifically written, observable, and appeared to be teachable; for example:

* Will verbalize about what he has drawn or written
* Takes part in a manipulative game (pulls string, turns handle) with another person
* Will trace letters of name

Some of the objectives were stated even more precisely, with what appear to be criteria for measurability added:

* Will count 5 objects aloud, no assistance
* Attend to music or story 5-10 minutes
* Take part in game, pushing car or rolling ball with another child 2-5 minutes

Still other objectives were more specific with regards to content:

* Will name colors of orange, purple, brown, black, pink, grey, and white
* Will know concepts of yesterday, tomorrow, and tomorrow night

- Will unzip separating front zipper

Only a few objectives were more broadly stated, and these were all in the Social Development area:

- Actively explore environment
- Practice self control regularly
- Seek out friendships with others

More specific objectives in that area included "attend to music or stories 5-10 minutes," "take part in game, pushing car or rolling ball with another child 2-5 minutes," and "carries out series of two unrelated commands."

Finally, a few of the objectives in the Self Help/Safety area were written so that their observability and/or teachability could be brought into question:

- Will avoid playing with and stepping on glass
- Will avoid playing with matches

These the teacher or parent might observe, should situations arise, but it is doubtful that a "lesson" would be planned or a measure developed to assess their achievement.

Many of the objectives in the Self Help area related to activities that could occur either in school or at home (e.g., eating, dressing, grooming, toileting). One, "will dry body after bath," was solely aimed towards the home, as no baths were given in the preschool program.

A consideration of the objectives in relation to scope and sequence of a curriculum was also undertaken in the analysis of the contractual plan. Under Speech/Language Skills, Michael was to accomplish the following:

- Use elaborate or extended sentences
- Ask questions about persons or things

- Relate experiences with some understanding of sequence and closure
- Verbalize about what he has drawn or scribbled

Taken together, these formed a picture of the need for Michael to engage in conversations to describe, ask, and verbalize; in short, to become more facile in the use of verbal language. The remaining objectives under Speech and Language Skills were more discreet and related more to grammatical usage and time concepts:

- Expresses future occurences with "going to," "have to," and "want to"
- Will learn "long time" and "short time"
- Will identify routine events
- Will recall recent past
- Will recall major events in the distant past
- Will know concepts of yesterday, tomorrow, and tomorrow night

Here again, the objectives provided cues for the teacher to engage Michael in conversations about past, present, and future events, learning concepts as well as syntactical structures.

In the Cognitive Skills area, a variety of kinds of objectives were included, but they appeared to be listed with little relation to larger curricular topics or goals, and with little consideration of scope and sequence. Nearly a third of the objectives dealt with diverse learnings: identifying colors, shapes, and body parts; understanding stop and go, same and different, and other opposite analogies; and giving his town and street address. Several objectives dealt with a variety of number skills:

- Will report a sequence of 4 numbers
- Will count 5 objects aloud, no assistance
- Will count and point to 6 objects in imitation
- Will match 2 sets of objects
- Will tell which has "more" or "less"

In addition, one objective dealt with ordering, four with sorting, two with reading readiness activities, and one with art.

The number and diffusion of objectives cited above serve as an example of identified gaps in sequence. Similar observations were made in the categories of Social Development and Fine Motor Skills. Part of this may have been due to parallel weaknesses noted in the Thesaurus itself. For instance, the Thesaurus listed the following as the sequence for early number skills:

* Match one-to-one (3 or more objects)
* Demonstrate understanding of concept "one"
* Count to 3 in imitation
* Count to 5 in imitation
* Count 10 objects in imitation
* Pick up specified number of objects on request
* Count by rote 1 to 20 (p. 19)

Notable gaps included the omission of objectives for the concepts of "two" or beyond, for matching sets, and for numeration skills.

In the Self Help and Motor areas, the opposite appeared to be true. In these areas, sequences of tasks were broken down into very discriminating parts. For example, under Dressing, the following objectives were designated for Michael:

* Will dress unsupervised except for help with difficult fastenings
* Will zip clothes
* Will unzip clothes
* Will unzip separating front zipper
* Will unbuckle belt
* Will snap clothing
* Will unbutton clothing

Here, the more detailed statements might have been considered examples of the first objective, which in turn could have been viewed as the goal statement. Similar patterns occurred in the other Self Help areas.

In all, 87 objectives were distributed across seven categories.

The categories and the distribution of objectives within them are illustrated in Table 5.1; Appendix F contains the full document.

Table 5.1
Distribution of Objectives in the Contractual Plan

Categories of Objectives	Number		Percent	
1. Language/Congnitive Development		32		36.8%
a. Speech and Language Skills	10		11.5%	
b. Cognitive Skills	22		25.3%	
2. Social Development		9		10.3%
a. Socialization	5		5.7%	
b. Behavior	4		4.6%	
3. Motor Development		21		24.1%
a. Fine Motor Skills	6		6.9%	
b. Gross Motor Skills	15		17.2%	
4. Self Help/Health Skills	25	25	28.7%	28.7%
TOTAL:		87		100.0%

In analyzing the relationships among the categories of the contractual plan, the Language/Cognitive area was given the most emphasis (36.8%) with Self Help Skills next (28.7%); least emphasis was given to Social Development Skills (10.3%). There was little difference between the two subsets of Social Development, Socialization and Behavior (5.7% to 4.6%, respectively). In Motor Development, by far the heavier emphasis was given to the subset of Gross Motor Skills (17.2% compared to 6.9% for Fine Motor Skills). Any comparison between Speech/Language and Cognitive Skills was considered spurious because there was so much potential for overlap with the respective objectives; many objectives could easily have been placed in one and/or the other category. A reconfiguration of the categories in

Table 5.2 summarizes the programmatic emphases reflected in Michael's contractual plan.

Table 5.2
Programmatic Emphases of the Contractual Plan

Programmatic area	Percent
1.Language/Cognitive Development	36.8%
2.Self Help Skills	28.7%
3.Gross Motor Skills	17.2%
4.Fine Motor Skills	6.9%
5.Socialization	5.7%
6.Behavior	4.6%

In the analyses that follow, the 15 Gross Motor Skills were excluded, since gross motor activities were not observed or videotaped during the data collection periods. Numbers and percentages that follow in subsequent chapters are based on the 72 remaining objectives.

Analysis of the Future IEP

The IEP developed in May for Michael's next year in the preschool program was similar to the former, with the notable exception that there were objectives listed in many more categories. A total of 51 objectives were distributed across 12 categories. As before, many of the categories lacked clear definition and overlapped; for instance, "will compliment other students sincerely" was listed in the Behavior/Social area, while "will apologize without reminder" was included in the Socialization area. The objectives were reconfigured according to the categories of the first IEP to enable better comparison, and the areas of emphases that emerged are shown in Table 5.3.

Table 5.3
Distribution of Objectives in the Future IEP

Categories of Objectives	Number		Percent	
1. Language/Cognitive Development		20		39.2%
a. Speech and Language Skills	10		19.6%	
b. Cognitive Skills	10		19.6%	
2. Social Development		15		29.4%
a. Socialization	8		15.7%	
b. Behavior	7		13.7%	
3. Motor Development		10		19.6%
a. Fine Motor Skills	5		9.8%	
b. Gross Motor Skills	5		9.8%	
4. Self Help/Health Skills	6	6	11.8%	11.8%
TOTAL:		51		100.0%

In the future IEP, there was more emphasis on Social Development and less in the Self Help/Health and Gross Motor areas than in the prior IEP. In addition, there was less disparity among the subsets of Gross and Fine Motor Skills. Overall, the future IEP showed a greater concern for Michael's interaction with other children than previously. Objectives in this area of his future IEP included:

- * Will play with 4-5 children on a cooperative activity without constant supervision
- * Will ask permission to use objects belonging to another
- * Will choose own friends
- * Will compliment other students sincerely

Another increased area of emphasis was in the area of behavior. Objectives here reflected the need for Michael to attain school-related behavioral skills such as:

- * Will carry out a series of 3 directions
- * Will increase independent working time to ten minutes when given work at instructional level
- * Will wait no longer than 3 minutes to ask for

help on work not understood
- * Will select and engage in one individual free time activity for a period of 10 minutes

As before, the Cognitive and Language areas overlapped. Again, many of the language objectives focused upon usage; for example:

- * Will use "could" and "would" in speech
- * Will use correct verb tense
- * Will answer questions beginning with who, what, when, where, and why

Other language/cognitive skills were again concerned with naming more abstract items (address, time of day, coins) and understanding more complex concepts (yesterday, today, and tomorrow; sameness and difference). In the pre-reading area, Michael was expected to achieve four objectives:

- * Will put 3 pictures in order
- * Will match similar words
- * Will recall main facts from a story heard
- * Will identify a missing detail in a picture

Fine Motor objectives stressed handwriting, particularly the ability to print his first and last names, as well as to print them on all school papers. Gross Motor objectives were decreased dramatically, and dealt with skipping, hopping, swinging, and walking a balance board. The Self Help objectives indicated that Michael had yet to achieve buttoning and unbuttoning skills. The only Health objective listed was that Michael would learn to consistently wash his hands after eating and toileting.

As in the first IEP, gaps in sequence were noted as well as a lack of statements of overall goals other than the topical/curricular areas provided to differentiate types of objectives. Again, most objectives were written specifically in terms of content, observability, and appeared to be teachable. In several, evaluative criteria were fairly specific ("hops on one foot 5 successive times"), though not to the extent of the prior IEP. Again, there was one globally-conceived objective included in the future IEP: "will view self as a capable and important individual."

Summary

The contractual plan presented a somewhat lengthy listing of objectives in a variety of topical or curricular areas to be achieved by the child-subject. While teachers, parents, and administrators participated in its development, the Thesaurus appeared to play a heavy part in structuring the content and format of the statements. There was little indication of broad, over-riding goals in the contractual plan, except through topical headings under which various objectives were grouped. Most of the objectives contained in the contractual plan were specific and "teachable," with several written as measurement devices. Only a few were worded so broadly that they were subject to misinterpretation; in fact, these could easily have been listed as annual goals, given the criteria cited in the Thesaurus.

While the objectives were detailed and provided instructional direction to the teacher, there was evidence presented to indicate gaps in scope and sequence, especially in the more complex areas of language and cognitive development. Theoretically, the IEP was intended to serve as a framework for the child's program, rather than prescribe the total program. An attempt to specify all of the sub-objectives for all the skills listed may have led to a plan of far too many items. However, there was a lack of overarching statements to cast these somewhat disparate objectives into a more cohesive framework from which the teacher could extend.

The preponderance of objectives were school-oriented, with the exception of the Self Help area, and were heavily focused on cognitive and language skills. Socialization, an area emphasized in many preschool programs, had minimal designation in the first IEP, and half of those objectives listed dealt with school behavior more than play. Generally, both the current and future IEPs valued many of the preacademic skills which are important in the early years of public schools. In addition, there was a heavy emphasis on self help and gross motor activities in the current IEP, these perhaps traditional areas for special education programs. The future IEP stressed more of the socialization and behavioral skills necessary for success in school.

The teacher participated in both IEP meetings, although she indicated she was at a disadvantage at the first due to her lack of knowledge of the child. She took an active role in the revision of the IEP once her knowledge of Michael's skills and achievement were better known. The teacher kept a copy of the IEP at her desk and referred to it periodically during the year for assessment of progress. She was also a participant in the development of the future IEP.

In all, then, the contractual plan consisted of fairly specific IEPs, focused upon academic and self help skills. It was a plan that the teacher referred to periodically to guide her planning and instruction. The next chapter presents a picture of what transfer occurred in the teacher's head as she integrated that knowledge and experience into her thinking and action in the classroom.

CHAPTER VI

THE PHENOMENOLOGICAL PLAN: DATA COLLECTION, ANALYSIS, RESULTS

An important element of individualization as conceptualized in this study is teacher intent. To describe this phenomenological plan and its effects on the classroom, another set of research procedures was developed. In this chapter, how descriptive data were gathered and analyzed to explicate the teacher's phenomenological world --- her values, her interpretations, and how she decided what was important to teach Michael --- will be presented. As in the previous chapter, procedures of data collection and analysis will be described, and results reported.

Data Collection

An ethnographic approach was taken to gather information about the phenomenological plan. The researcher became an observer-participant in the classroom, recording field notes about classroom activities, teacher behavior, and planning activities. The goal was to become a comfortable part of the classroom scene, so that one could observe unobtrusively, hold discussions informally, and later, conduct more formal interviews easily.

The major mode of data collection for the phenomenological plan was the interview, supplemented by field notes from observations and informal discussions. The interviews were conducted over a period of five months, although most occurred during the last two months of the school year, just preceding and during the videotaping phase. While the teacher was usually the primary respondent, one interview was also conducted solely with the instructional associate, and she participated in some of the other interviews and discussions as well.

The research question guided the purpose of the interviews: to document a plan that reflected the goals and objectives for Michael that resided in the mind of the teacher. The first of the more formal interviews sought to identify the larger context within which the teacher considered Michael; i.e., her conceptions of the purposes of her preschool program and the things she believed important for her class to learn. Hence, she was asked to respond to questions such as the following:

* Talk about your overall goals for the preschool program.

* What kinds of things do you work on with the group?

Probes were utilized to help the teacher add more information or to clarify answers for the researcher. In addition, questions were geared to elicit information about what activities the teacher undertook with her class to achieve her programmatic goals. Her responses provided information that would later assist in the interpretation of both the interviews and the videotaped classrooms sessions, as in the following exchange:

> VCP: In terms of what you said --- getting the idea of the group and the socialization. Would you say that's a major skill that happens in Circle time?
>
> T: Well, that would be a structured socialization setting. But I'm thinking more of the children and their feelings for each other . . . Surely Circle is socialization,

but I'm structuring that. But the kinds of things I see happening that I like are the kids' sensitivity towards each others' needs.

VCP: And where, during the morning part of the day, does that occur?

T: Well, it happens all day.

VCP: All day. O.K.

T: It's spontaneous, so it's really hard to talk about . . .

In similar fashion, the teacher was asked to describe her long term goals for Michael, and his progress towards them. This particular avenue of questioning was repeated during the summer following data collection stage, to identify the goals and objectives the teacher felt Michael would need to work on during the forthcoming year. These data were used for comparison with the future IEP.

Prior to each week's videotaping sessions, additional interviews were conducted with the teacher. The purpose of this set of interviews, numbering three in all, was to identify the short term objectives the teacher held for Michael across each week during the time Michael was videotaped. These interviews provided information about the activities she had planned for Michael and the group, and the concommitant learnings she expected. Again, probes were used for elaboration and clarification:

T: We need to work on all the colors in our crayon box. We worked a lot on purple. Most of the kids are really able to identify all eight colors. So now we'll go a step further and have them match them. Play some games with them.

VCP: And matching is, showing them a purple . . .?

T: A card.

VCP: They'll find one?

T: Or a peg.

VCP: Mm-hm.

T: We migh[illegible]t a little bit into generalizing (color[illegible] other things. I'm not sure Micha[illegible]eady for that. Like saying the sun [illegible] and the grass is green.

VCP: Mm. Like, what else in the room might be yellow?

T: Yeah. We might get to that. But, we'll work this week, and we'll continue to work on this throughout the whole rest of the six weeks of school.

In all, six teacher interviews comprised the database for the phenomenological plan. Each of the interviews was audiotaped and transcribed; The transcriptions formed the basis for the analytic activities described below.

Analysis of the Phenomenological Plan

The research problem for this aspect of the study was to derive a way of synthesizing the interview data so that a phenomenological plan emerged. What was desired was a representation of the teacher's intent which could be compared to both the written plan and the observations of the program-as-experienced. The following discussion of the procedures utilized to achieve this will evidence how the tenets of content analysis and category construction were executed so that the conditions of objectivity, systemization, generality, and manifest content (described in Chapter III) were met.

Determination of the Unit of Analysis

Two factors were considered in the decision regarding selection of the unit analysis. First, that the outcome of the analysis needed to provide some depiction of what the plan in the teacher's head looked like. Second, a unit of analysis that was comparable across all three types of plans was necessary. Therefore, the definition of the unit of analysis for the interview transcripts was determined to be "an objective-like statement" made by the teacher. Given this, rules for coders were devised as follows:

1. Draw a box around any phrase spoken by the teacher in the transcript that gives some indication of an objective to be met by Michael, his Small Group, or the class as a whole.
    a. Include only one objective-like statement in a box.
    b. Repeated versions of the same objective are permissable.
    c. If the interviewer adds an objective, mark it only if teacher affirms it; if the interviewer's comment is only a restatement of the teacher's, do not mark it.
2. Label the type of objective you think it is:

C = Whole class goal
M = Specific to Michael
MG = Intended for Michael's group
O = Anything else

Training the Analyst Team

The analyst team was composed of the researcher and two undergraduate students, seniors in a special education certification program. With these analysts, there was little need to spend a great deal of time defining the concepts being utilized in the coding and category construction process; the analysts were well familiar with terminology such as goals and objectives because of their background in special education, a criterion for selection to the team. The purpose and outline of the study, however, were explained; the specific goal of this phase of analysis was also described. Each analyst was given a copy of the transcript set, and, since they were not the transcribers of the original audiotapes, the tapes were made available to them. One analyst had recently completed a practicum in the classroom under study (a serendipitous benefit) and assisted in describing the classroom program and the teacher-subject to the other.

Following this general introduction, a training session was held to describe the unitizing procedures and to illustrate them with some examples. Both of the analysts engaged in a practice session, unitizing three pages of a teacher interview, which was then matched to a criterion transcript which had been unitized by the researcher. Aside from a few questions of clarification, both analysts responded identically to the criterion transcript immediately, for this was a relatively discreet task.

Both researcher and analysts then completed the first interview and met again to check for inter-analyst agreement. Of 170 objective-like statements identified, there were discrepancies among the analysts on 10 of the items. The basis for the discrepancies centered upon level of specificity; that is, most of the variance occurred when one or more of the analysts considered a series of examples about one objective as singular rather than separate statements, or vice-versa. These were reconciled, and rules and procedures were clarified.

The Unitization Process

The analyst team proceeded to unitize the entire set of interview transcripts. Upon completion of the unitization task, the analysts met again to check for agreement and to reconcile differences. This time, of the 136 remaining objectives, differences were found in only three, and these were reconciled. Then the objectives were "frozen," and each was assigned an identifying number for reference in category construction. A sample of a unitized interview can be found in Appendix G.

In addition to marking on the transcripts, each analyst transferred the objective-like statements identified onto a 3 X 5 file card for later use in category construction. The following format was utilized on the cards:

(Type Code)
(Identifying Number)
"Objective-like Statement..."
(Interview text page)
(Interview date)

The Categorization Process

The actual construction of categories is a trial-and-error process, one Guba (Note 20) has coined as " bedspread solitaire." Initial sorts and groupings are attempted, and when a unit does not fit, new groups are instituted and other tentative sorts are explored. The categories and organizing schema continue to be modified until all cards are accounted for and the system is complete, fulfilling the rules of category construction.

Initially, each analyst was assigned the task of developing her own category system. The "rules" for this stage of the analysis dealt with the logic of the system as well as the issue of degree of specificity. As all analysts were educators, there was a natural tendency to want to construct the phenomenological plan according to commonly-known curricular headings, similar to those in the contractual plan. Although a logical system, such approach would have distorted the understanding of the teacher's perspective, as well as destroyed the comparative nature of the question and done injustice to the methodology. So the foremost guideline and criterion for category construction was to develop a system that reflected the teacher's unique system of labeling, grouping, and relationships. The transcripts became a major resource in assuring this criterion was maintained.

A second rule of thumb concerned the differing levels of specificity found among the statements. The key instruction here was to differentiate between subsets of a larger objective and examples of a particular objective. Examples were first clipped to their correspondent objectives, and then objectives within a particular superset were grouped together or organized into hierarchical order when appropriate. The examples were retained in the final rendition of the phenomenological plan, in anticipation that they would be useful as operational definitions of the objectives in the comparative analysis stage, when units from the other plans were matched to those of teacher intent.

Given these two guidelines, the analysts worked independently, and then reconvened to share their results and raise issues about their assessment of the emerging category set. While it was originally intended that some measure of inter-analyst agreement would emerge from these independent analyses, it soon became apparent that the team was moving away from that model to one of "expert panel." After two to three independent sorts, the team began to work collaboratively to construct the system. As before, the task moved between sorting the cards and reviewing the transcripts to assure that teacher context was guiding the decisions for the emerging groups. In addition, categories and subsets were checked for overlap (mutual exclusiveness) and homogeneity. A small set of "miscellaneous" cards remained unclassified, and were left for teacher corroboration.

A major product of the construction process at this stage was the schematic representation of teacher intent, as illustrated in Figure 6.1. This enabled the team to see the emergent system as a whole and to more quickly evaluate fit of objectives to overarching categories. Once the team agreed that the categories reflected the transcripts and whose definitions were mutually-exclusive and exhaustive, the task was deemed ready for corroboration by the teacher.

Teacher Corroboration

The teacher-subject received copies of the transcript and a copy of the schematic shown in Figure 6.1. She was invited to meet with the analysts for two reasons: to validate and to problem solve. First, the rationale for the categories was explained, and examples

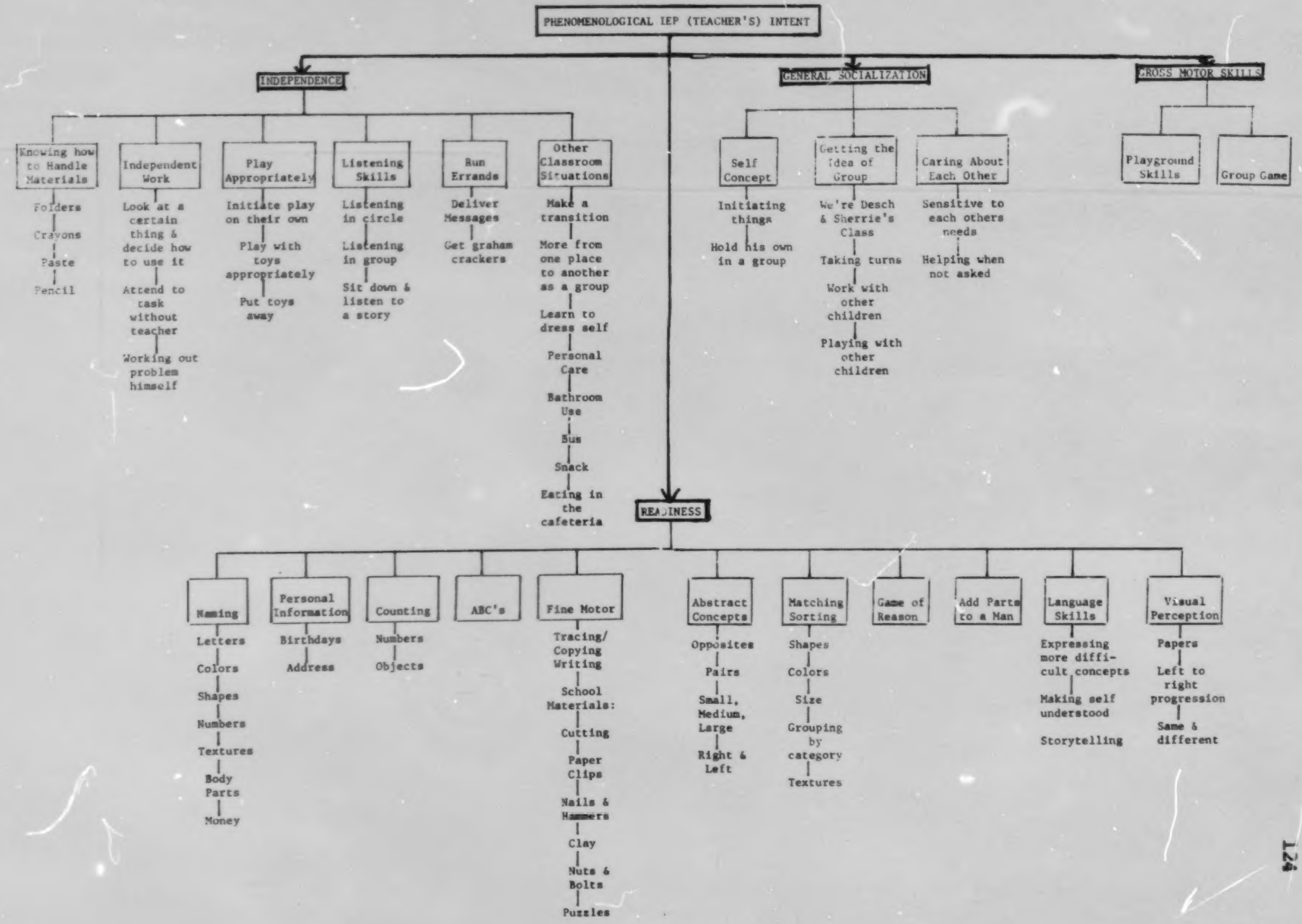
PHENOMENOLOGICAL IEP (TEACHER'S) INTENT
INDEPENDENCE
Knowing how to Handle Materials
Folders
Crayons
Paste
Pencil
Independent Work
Look at a certain thing & decide how to use it
Attend to task without teacher
Working out problem himself
Play Appropriately
Initiate play on their own
Play with toys appropriately
Put toys away
Listening Skills
Listening in circle
Listening in group
Sit down & listen to a story
Run Errands
Deliver Messages
Get graham crackers
Other Classroom Situations
Make a transition
Move from one place to another as a group
Learn to dress self
Personal Care
Bathroom Use
Bus
Snack
Eating in the cafeteria
GENERAL SOCIALIZATION
Self Concept
Initiating things
Hold his own in a group
Getting the Idea of Group
We're Desch & Sherrie's Class
Taking turns
Work with other children
Playing with other children
Caring About Each Other
Sensitive to each others needs
Helping when not asked
GROSS MOTOR SKILLS
Playground Skills
Group Game
READINESS
Naming
Letters
Colors
Shapes
Numbers
Textures
Body Parts
Money
Personal Information
Birthdays
Address
Counting
Numbers
Objects
ABC's
Fine Motor
Tracing/ Copying Writing
School Materials:
Cutting
Paper Clips
Nails & Hammers
Clay
Nuts & Bolts
Puzzles
Abstract Concepts
Opposites
Pairs
Small, Medium, Large
Right & Left
Matching Sorting
Shapes
Colors
Size
Grouping by category
Textures
Game of Reason
Add Parts to a Man
Language Skills
Expressing more difficult concepts
Making self understood
Storytelling
Visual Perception
Papers
Left to right progression
Same & different

Figure 6.1. Schematic Representation of Teacher Intent.

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of types of objective-like statements within those categories were given. She was then asked, " Does the scheme make sense to you? Does it reflect what you believe about Michael's program?" The teacher responded that the scheme was an "interesting" way to characterize what went on in her mind, one that she might never had thought of, but yes, that it "rang true." To probe further, a sampling of cards was identified for review, and she responded affirmatively that it made sense to put them in their respective categories.

The second task was to seek the teacher-subject's assistance in dealing with objectives that were of concern to the analysts. These included the seven objectives that had been cast into the "miscellaneous" pile, as well as nine others that had been tentatively, though with some uncertainty, placed into some of the other existing categories. This was in essence a test of the entire system which had been developed. Not only was the team asking her to place those objectives into an appropriate assumed-existing category, but checking the inclusiveness and validity of all the categories taken together. These questionable objectives had been marked on the transcripts previously provided to the teacher so that she could review her thoughts prior to the meeting with the analysts. The final phase of the corroboration meeting dealt with her responses to the problem.

For the objectives-in-question, the teacher clarified her meaning, especially defining her use of the words "sort"/"match"/"group" and "identify"/"name." The problem here had been one of semantics. The teacher had used these words interchangeably, and this had been confusing to the analysts, who had defined them differentially. The teacher clarified that she had meant the same type of skill, no matter what her choice of words; i.e., that Michael was only able to respond when a cue was given. For instance, to the teacher, "identify" and "name" both meant that the teacher would supply the label so that Michael could correctly identify an object or an action:

> Show me the red ball.
>
> Show me the picture of the girl who is running.

This was differentiated from a higher level response where Michael would need to supply the label from his own repertoire:

> What color is this ball?
>
> What is the girl doing?

Likewise, for "match"/"sort"/"group," the teacher meant that model sets would be provided for Michael to sort or match objects into, as opposed to allowing him to look at a collection and to determine groupings without assistance. In each of these instances, the teacher explained that her intent was that Michael was only ready to operate at the level of responding to a given cue, regardless of whether she used different words. For purposes of analysis, these skills were subsequently entitled "labeling" and "matching" whenever teacher intent was being considered.

Once the semantic problem was cleared up, the teacher proceeded to either confirm placement of objectives, suggest alternatives, or, in the case of the unclassified, miscellaneous ones, identify an appropriate category. As a result of this process, all categories and objectives were confirmed and accounted for, and one new, small category was added to accommodate two gross motor objectives. The system was considered validated and was deemed intact according to the rules of category construction.

Enumeration

The final step of the construction process was to transfer the category system from the schematic form to a document which could be compared to the contractual plan. The system was reconfigured as an outline, and was enumerated to indicate its hierarchichal structure. Additionally, the objectives were assigned identifying numbers for use in the computerized matching process described in the next chapter. Grouping them to account for semantic similarities and level of specificity, objectives were assigned to 72 numbers (only coincidentally the same number as the contractual plan). This operational manifestation of the phenomenological plan can be found in Appendix H.

Results

The phenomenological IEP was derived from a content analysis of a series of teacher-subject interviews which focused upon classroom goals and program objectives for the child-subject, Michael. The content of teacher intent was relatively simple to codify; 306 "objective-like statements" were identified and sorted into categories. The major categories included the following:

1. Independence/School Socialization skills, including handling materials, working and playing independently, listening skills, and self help skills.
2. School Readiness/Preacademic skills, including labeling common objects, knowing personal information, counting and saying ABC's by rote, fine motor skills, understanding abstract concepts, matching, language skills, and visual perception skills.

3. Getting along with other children, including self-concept, gaining a sense of group-ness, and caring for others.
4. Gross Motor skills, including playground and group game skills.

What was more complex a task was the depiction of the organizing framework, within the teacher's head, which housed these objectives. The context of the interviews taken as a whole and teacher validation were used as standards for decision-making, so that the subsequent organization and schema did reflect the major themes of the phenomenological plan. But a caveat must be applied to these representations in order to reflect that the phenomenological plan as documented in this study was but a model of reality; and being a model, was only one of the many depictions of the "reality" that existed in the teacher's mind. It may not be a completely adequate rendition of teacher intent, for in the attempt to capture and make concrete what existed abstractly in the mind, decisions which were linear, logical, two-dimensional, and arbitrary often had to be made, albeit validated through the processes of inter-analyst agreement and teacher corroboration. In addition, the interviews were time-bound and content-bound by their very nature. The following analysis should be delimited by the understanding of that caveat.

What characterized the phenomenological plan, the program for the child which existed in the teacher's mind, was that it was part of a larger, complex system of intent. The teacher's plans for Michael were nested in goals that she held for the classroom as a whole, and were intermeshed with those she held for other children as well. The phenomenological plan also reflected the teacher's personal values --- what she felt was important for the children to gain as a result of their experience in her classroom. Finally, her intent for Michael was influenced by what she perceived to be the demands of school in its role as an agent of socialization. The teacher's decisions about Michael's program appeared to have been mediated by four factors: her knowledge about Michael's development and needs, the goals of her program, her personal values, and her perception of what school would expect from him.

First, despite the presence of an individualized program for Michael, the teacher's goals for her own program provided a major framework for what she intended him as well as all of her students to accomplish. She characterized this under the rubric "independence," and it was one of her highest priorities:

> . . . the biggest goal I have for all these kids is for them to achieve as much independence as possible.

She intended that the children be able to take care of themselves, perform typical classroom routines, and behave with as little adult intervention as possible:

> Mike is going to have to learn that adult reinforcement doesn't come every five minutes. He has to learn to do a job without adult reinforcement. And I think he can. I really do. Because he's a very motivated kid.

This included being able to work and play independently, particularly initiating and sticking with activities without a great deal of teacher direction or monitoring. It also included many self help and behavior skills:

> Now, this is the ideal. Picking an appropriate toy all by yourself, with as little adult intervention as possible, or contact. Listening for directions when it's time to put toys away. Coming to the table without a physical or verbal reminder. Feeding, self-feeding. Eating crackers. Drinking juice. Knowing what to do with it. Coming to Circle listening. Listening in group work, and being able to make a transition. Again, going from a group and being able to make or find something all by yourself to play with. And playing with it appropriately.

A subset of this goal of independence was her intent that the children learn how to conduct themselves in school settings, especially for Michael and those nearing kindergarten/special education entry:

> Maybe I'm too hung up on preparing these children for school. But a lot is expected of special children . . . because they're always at a disadvantage, even in a self-contained classroom. And hopefully, particularly now when the thrust is more and more to get these kids out of the self-contained classroom into mainstreaming and to integrate them and give them an opportunity --- they've got to look good . . . they've got to have those skills.
>
> . . . to develop, in each of them, some type of listening skills. Just to give them a feel for what school's all about. How to conduct themselves, and all the small things, like learning to eat in the cafeteria . . . Because this is something they'll all need to know how to do. Just how to find their way around the classroom. And how to play appropriately.

In the area of play, the teacher defined Michael's objectives more in terms of independence behavior rather than in terms of any need for him to have opportunities to interact socially with other children. She especially saw the provisions of play material as important vehicles for Michael to develop initiative and to increase his attention span:

> . . . how to play appropriately. I should have put it way up there, probably with independence . . .

> Initiating play on their own. And even if they do play in a group, in a small group, sticking with something. Finding a toy, playing with it appropriately, and then putting it away when the time indicates that it's time to stop.

The teacher's conception of the purpose of play differed from that of the contractual plan. There, the four play objectives listed were geared towards social development, directing that he be able to play and use materials with other children and to seek out friendships. Only in a discussion of her goal to help the children develop a sense of group-ness does the teacher touch upon this interpretation of play:

> Certainly another big goal would be for these children to get the idea of a group. What it means to be sensitive to each others' needs. Learning how to share, learning how to take turns, just general socialization.

For Michael, the teacher was considering placement in a regular kindergarten classroom. The expectations of that setting were a heavy influence upon her behavior:

> So Michael, if he goes to kindergarten next year, is going to need a lot of survival skills. A million of them! We were sent a survey, about six or seven pages long, of the survival skills kids need to even get to enter kindergarten! So I have to constantly keep that in the back of my mind!

Therefore, many of the independence objectives intended for Michael by the teacher were evaluated in the context of her perceived expectations of a kindergarten classroom:

> And when work time begins, you're sitting down in a learning center with three other kids, and you're on your own! Your teacher lets you know what to expect . . . He needs to know when he sits down at a little table with a board and chips and colored water what he's supposed to be doing. He doesn't have a teacher sitting three children away from him, because she is probably wandering around the room, helping. And maybe a student teacher. But

> we're talking about 20 kids. So, can he do it? Can he attend to task?
>
> You can also go back to putting a toy away when you're through with it. Using the bathroom facilities. Getting a Kleenex. Half of these kids don't go to lunch, so he's already ahead of them there . . . Knowing how to handle materials --- not toys, but materials. That's a big one! What do you do with a pencil? You don't write all over the table with it. You don't eat paste. Crayons belong in a box somewhere. That type of thing. And really, being able to handle a tremendously stimulating environment. From what I've seen of kindergarten these days --- wow! Unbelievable!

The teacher had not only Michael's success in mind, but also felt responsiblity for the impact of the total special education program:

> He does need, he does deserve the opportunity, I think. And I want him to feel good about himself. And, let's face it. You also want the kindergarten teacher to feel good about special education preschool. That's important! Because a kid like Michael is going to pave the way, maybe, for some other children that maybe don't have his ability.

Further examples of the teacher's intent in the Independence/School Socialization area can be found in Figure 6.1 and in Appendix H, under the heading Independence/School Socialization (1.0).

Closely aligned to the Independence/School Socialization goals were those which dealt with Michael's academic development. These are listed in the section of the phenomenological plan entitled School Readiness/Preacademics (2.0). It was here where the teacher's intent was most congruent with the contractual plan. It was here also that the teacher's knowledge of Michael's individual needs and present level of performance were most noticeably used in the determination of objectives. Yet except for her emphasis on Michael's language needs, most of what the teacher intended for Michael was also held for the other four children in Michael's work group. Indeed, most of the

School Readiness/Preacademic objectives were implemented in the activities of Small Group, the remainder primarily during Circle Time.

Teacher intent for the School Readiness/Preacademic area likewise reflected her concern for teaching Michael what might be expected of other children of his age in a regular classroom situation:

> And this is why I know that we seem very structured. That a lot of that structure helps these kids learn, I think, faster.

The teacher's classification of objectives followed fairly typical curricular patterns: naming things, such as colors, shapes, body parts; counting; fine motor skills such as tracing and using materials such as scissors, paper clips, puzzles, clay, hammer and nails; matching and sorting activities; language skills; visual perception; learning the ABC's; knowing personal information such as addresses and birthdays; playing games of reason; and adding parts to a man.

There was high congruence between the preacademic objectives the teacher had in mind for Michael and those listed on the contractual plan under the heading Preacademic. Of the 22 listed there, only four were not also explicitly mentioned by the teacher: those included "will understand stop and go," "will indicate first letter of own name," "will repeat a sequence of four numbers," and "will group objects by function or use." However, the first of those could be implied from her intent of understanding opposites, and the last from her objectives for grouping pictures into categories, although she did not mention them as explicitly as she did other examples.

The teacher's intent extended beyond the contractual plan's academic objectives in four ways. First, she was more explicit in the kinds of matching activities needed by Michael; she indicated the need to match colors, sizes, textures, and categories, whereas the contractual plan utilized the generic statement, "will match two sets of objects." Second, where the contractual plan indicated Michael was to name basic shapes, colors, body parts, and personal information, the teacher intended Michael to achieve more: he was expected to name more difficult shapes, numerals, money, and his birthday. The contractual plan did, however, indicate more colors to be learned than the teacher intended; it added pink, grey, and white to those colors found in the school crayon box, which the teacher had set as a criterion.

Third, the teacher intended that Michael explore some academic areas not designated in the other plan. He was to understand concepts of pairs and of right and left. She intended he learn to rote count to 20, to say his ABC's, and to recognize the first six letters of the alphabet. He was also expected to learn to play games of reason, "like Candyland," and to identify missing parts of a pictured person.

Finally, the teacher's notion of reading readiness objectives for Michael went far beyond the sole objectives of "reading books from memory" and "will tell the name of, or facts about a familiar story" that had been listed on the contractual plan. Her concept of where Michael was to move was closely tied to language development and storytelling. She intended that he be able to name characters in a story and to recall what they had said. She also stated objectives regarding telling a story from a series of picture cards strung together or from "reading" a book:

> We will work on helping Mike tell a story, just using the pictures. This is a language activity actually. But it also involves a lot of reasoning and concept ability. We worked on it a bit this morning and he did a pretty good job. It's a very teacher-directed activity. The questions are leading questions to the children. We look at the first picture. We label who we see in the picture. We go through the pages, and we talk about the story . . . So my requirements for Michael, having accomplished this activity --- but I think it probably will take a few weeks, would be if he actually had a book in front of him and he could pretty well tell me the story, flipping through the pages. With probably some cues yet from me. Because Michael still is not --- he's verbal, but it'll be difficult because he's going to have to use quite a bit of language.

The teacher's intent in the language area had a far different flavor than that of the contractual plan. She provided a framework for Michael's objectives that related his present level of performance to goals she felt important for him to achieve. It was in the language area, more than any other, that her objectives were most individualized towards Michael's needs rather than his group's or the entire class's. In her assessment of Michael's language needs, the teacher made two types of comments, somewhat contrary yet indicative of the framework for the objectives she determined for him:

> 1) He was in a program before where he was the follower, and he was little in stature . . . The children were all very close to him in age and ability, but being the smallest and not having his language skills developed where they should be for his age, he just followed around behind everbody . . . Michael's at a disadvantage because of his size. He's at a disadvantage because his language skills aren't quite where they should be. He's at a disadvantage because maybe he's going to test in the low-average.
>
> 2) Language-wise, Mike has a soft voice. He expresses himself very well. But a lot of kids

> won't maybe stand around and listen to what he has to say.

Rather than concentrate on specific syntactical objectives as had been stated in the contractual plan, the teacher's language objectives for Michael were focused upon being able to be understood, to imitate language on his own, and to have a conversation. She also intended that he learn to express himself about abstract concepts, such as "what do you do when you're sick, or when you go into a room that's dark?" Her intent behind these kinds of objectives was to develop his language skills to a level comparable to his kindergarten counterparts, so that he "could hold his own in a group of children so that he didn't slip back and become the baby, where people do things for him, rather than him initiating."

This notion of strengthening Michael's self-concept did not appear at all on the contractual plan, but permeated the teacher's goals:

> I'd like to see him need less adult reinforcement all the time. But that's a *growing* thing. You really can't push it *too* much. I mean, that's why he's *here*, in a small group, so he can get that. And I think when he was in Head Start, his self-concept was pretty low because he was a follower. And he never initiated play. He was always used as the baby, he's not quite there. But I've seen really good growth. And he feels comfortable in the room. And he feels good about what's happening.

The teacher included both fine motor and language objectives under the School Readiness/Preacademic area of the phenomenological plan. Both plans indicated similar fine motor objectives for using paper clips and copying his name from a model. While the teacher indicated Michael could be expected to trace and copy shapes from a model, the contractual plan listed the more sophisticated ability to draw them without a model. Conversely, the contractual plan directed that

Michael be able to print his own name from a model, while the teacher intended he learn to write it without copying. The contractual plan included two other fine motor objectives not referred to in the phenomenological one: creasing paper and drawing a person. Likewise, the teacher included several distinctive items: cutting, working with hammers and nails, and unscrewing nuts and bolts.

The aspect of the phenomenological plan which most reflected the teacher's personal values was her intent to help the children in her classroom develop a sense of group-ness:

> . . . the fact that we're a class, we're Preschool. Hooray for us! That kind of thing.
>
> It's interesting for me because I have never had a class . . . that I've seen such a wonderful sense of 'group.' And we care about each other. It doesn't matter if one of us maybe can't walk and one of us can't talk, and three of us are still in diapers.

There was, however, a deeper intent articulated by the teacher regarding this goal of group-ness: that the children learn kindness and sharing, to get along in a classroom society where there were differing needs and differing levels and areas of ability. As she reflected:

> I'm thinking more of the children and their feelings for each other, their sensitivity toward each other, their kindness toward each other.
>
> Surely Circle is socialization, but I structure that. But the kinds of things I see happening that I like are the kids' sensitivity towards each others' needs . . . . it's spontaneous, so it's really hard to talk about. Giving help when help is not asked for. If one child drops her bottle on the floor, somebody picking it up. If another child is sitting in her chair and her tray's empty of toys, a kid putting a toy in. Somebody saying they're sorry when they knock somebody down, without me saying, without me constantly being on their case.

> Then also teaching the children about each other, because we're all very different. You know, how do we react to a certain child? She's always on the floor, so we have to watch out for one another. Respect for each other.

These types of concerns were not listed in the contractual plan; they appear in the phenomenological plan under the heading General Socialization (3.0), along with the teacher's objectives for improving Michael's self-concept.

Comparison of the Phenomenological and Contractual Plans

Perhaps the most outstanding distinction between the phenomenological and contractual plans was their differing frames of reference. While the objectives of the contractual plan were categorized according to curricular topics, those in the phenomenological one were organized according to a very different gestalt. In the teacher's mind, her intentions for Michael were nested within three overarching goals: that he be able to function independently, that he succeed in a regular kindergarten classroom, and that he become a sensitive member of a social group. The contractual plan, on the other hand, emphasized the development of cognitive/language, self-help, and motor skills. Within these differing goal areas, however, the two plans were not contradictory. Rather, the teacher's broader outcomes complemented the curricular-bound flavor of the written document.

Figure 6.2 illustrates the extent to which the contractual and the phenomenological plans were congruent. For the most part, nearly 75% of the objectives contained in the contractual plan were also a part of teacher intent. Only a few were not accounted for either explicitly or by implication; namely, the safety objectives and the more

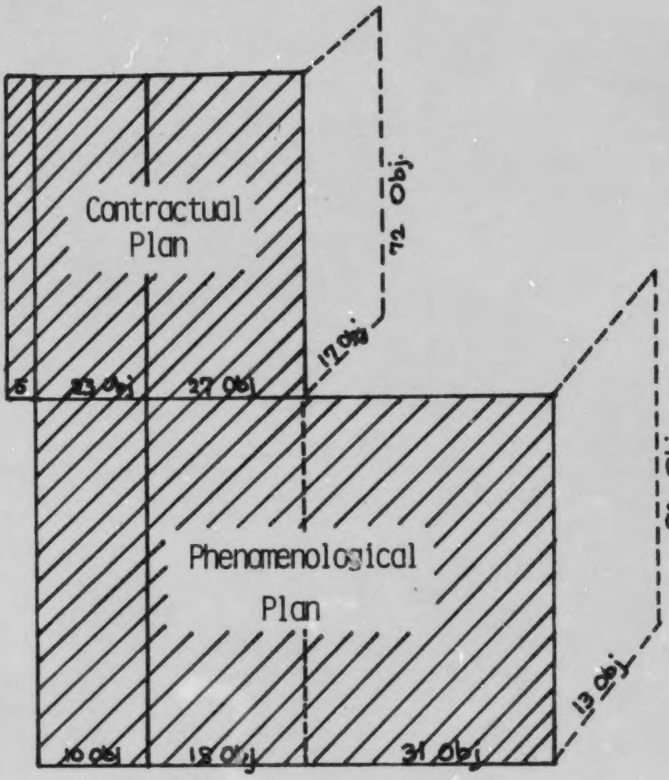

Contractual Plan
72 Obj.
12 Obj.
5
23 Obj.
27 Obj.
Phenomenological Plan
72 Obj.
13 Obj.
10 Obj.
18 Obj.
31 Obj.

Figure 6.2 Extent of congruency between the contractual and phenomenological plans.

isolated ones such as "will repeat a sequence of four numbers," "will carry out a series of two commands," and "will dry body after bath."

While many of the objectives may have appeared to be common, they differed in intent, however. The same objectives listed in the contractual plan as steps towards achievement of curricular goals served as means to differing ends in the phenomenological plan. For instance, in the teacher's mind, self help skills led to greater independence; academic skills led to higher probability of success in a regular education program; and language skills led to increased self-concept and the ability to hold one's own in a group.

The effect of the differing gestalts was most evident in the language area. The contractual plan presented a series of loosely-related syntactical and expressive language skills. On the other hand, the objectives in the phenomenological plan were set in the context of interactive as well as expressive language ability, with no reference to grammatical forms or usage. The teacher also placed these skills in the broader context of social language development: making oneself understood, conversing, expressing abstract concepts, and storytelling. She also related Michael's achievement of language skills to the development of his self-concept, his ability to function in a group independently, and his probability for success in regular education. So for the teacher, the achievement of specific objectives in language were for the purpose of broader, more personal and social outcomes.

A similar though opposite effect occurred with play. The contractual plan's play objectives appear to have been geared toward promoting cooperative play, a traditional value of many preschool programs in developing social and cognitive representational skills. However, teacher intent emphasized Michael's ability to initiate and sustain appropriate play, primarily with materials, as activities geared toward fostering his growth in independence and the ability to operate in a classroom with little or no adult intervention, rather than towards fostering social or cognitive ends. Only one reference was made to playing with other children, in general terms, in the explication of kinds of objectives she had for the development of a sense of group-ness and sensitivity towards others.

While most of the objectives of the contractual plan were contained in teacher intent as well, albeit with differing expected outcomes, the phenomenological plan also extended or added to those listed in the written document; 60% of the teacher's objectives extended beyond the contractual plan. Independence and self-concept, already discussed, were the majority of these, along with her more sophisticated language outcomes. This was particularly evident in the objectives she described for prereading activities, including storytelling, recognition of alphabet letters, the recitation of the ABCs, and left-to-right progression. In other academic skill areas, she added objectives regarding money, textures, the concepts of pairs and right/left hands, and the identification of numerals. She also included several objectives on learning how to handle materials, such as paste, scissors, pencils, hammers and nails, nut and bolts, and school folders. While the contractual plan provided more detailed breakdowns of self-help skills, the teacher extended them to school-related settings; i.e., getting off the bus, eating in the lunchroom, and following classroom bathroom rules.

Thus, a second effect of the distinction between the two plans emerged: present and future classroom settings created a context for the delineation of teacher intent, which may have provided her a way of organizing and synthesizing a myriad of objectives, not only Michael's but those of the other children as well. Classroom settings could serve as vehicles to achieve many objectives in naturally-occurring events and procedures; the need for specific "lessons" was then reduced.

Finally, the phenomenological plan reflected another way which the teacher coped with large quantities of objectives emanating from all the children's individualized needs. To achieve parsimony, she integrated a great many of her objectives for Michael with the goals for her classroom and for Small Group. Of the objectives she held for Michael, 38% were unique to him while 31% related to him as a member of Small Group and another 31%, to him as a member of the preschool classroom. Therefore, large group activities, particularly those related to independence and social behavior served as vehicles for her to achieve those objectives for Michael as well as for many of the children at the same time. Most of Michael's academic skill needs were integrated with those of his small work group, where all the members were candidates for kindergarten or primary special education placement the following year. The two areas of objectives specified uniquely for Michael were the development of his language skills and his self-concept; however, these also could be achieved in the context of regular activities or with other children.

So that while an individualized program for Michael existed on paper, it was translated to a program that was implementable with a number of other children in groups of varying size. Thus, while a contractual plan purported to treat Michael as an individual, listing objectives based upon his present level of performance and current needs, the teacher's conception of Michael's program became nested within a more complex arrangement, including the goals of her program as well as objectives for other children, particularly those closest in ability to Michael. What began as an isolated, standard, curriculum-related set of individualized objectives for one child was transformed by the teacher's sense of purpose, the demands she believed the school would make on Michael as he progressed through public education, and her management ability.

The Teacher's Future Plan

Following the end of the school year, a final interview with the teacher took place to discuss particular needs she had identified for Michael for the year-to-come. These goals for Michael encompassed four areas: his ability to express himself, his self-concept, his social skills, and his academic skills.

The teacher was content that Michael had achieved the "survival skills" she had anticipated he would need to succeed in kindergarten. More important to her was the development of his social and language skills:

> I feel good about Michael's academic or pre-academic, pre-readiness skills. Again, he's going to be up against a lot more competition than he is now. And, that's something that he'll have to work through in a group. But I don't think in kindergarten he is going to be challenged to do things he cannot do. I think he has the skills to do what I am aware that a kindergarten child in his particular place is going to be asked to do.
>
> I think the social part is more my concern. You know, how is he going to function within a group with his language which is limited? Now I am sure there are going to be some other children, too, whose language is not excellent. But there will also be some children who have better-than-five-year old language. So he will be at the bottom of the group, language-wise.

Her goals for his language and social skills were integrated. She wanted him to increase his ability to express himself and to hold his own with his peers. Although he still sought adult reassurance and needed to continue work on strengthening his self-concept, she felt he was comfortable with himself, that he "[knew] what he wanted and he's figuring out how to appropriately get it." For her, the "appropriate behavior" Michael needed to still work on was cooperating, sharing, and playing with other children:

> T: I think Michael plays well with other children, but he still is basically a very selfish child. And I see. . . the average five-year old as being a little more giving than he is...I don't think he's there. He knows, he understands taking turns, he understands sharing...he doesn't [yet] know that it's not acceptable to take toys away, this type of thing.
>
> VP: He's at that playing stage where he really plays better either by himself or alongside another child?
>
> T: Yeah, parallel play...the give and take in play...yeah, and he should be there.

She concluded that he had good listening skills, was motivated to learn, and was good at problem-solving --- abilities she felt would help him during the coming year.

In terms of academic skills, the teacher was satisfied with his progress. Specifically, she believed him ready for prereading activities, and enumerated such skills as simple word recognition, interpreting pictures, and telling a story from pictures. She also listed learning to print his name without tracing, recognizing all the alphabet letters and numerals, rote counting to 20, and reviewing the concepts of one to five as goals for the next year.

In comparing the future phenomenological plan with the one developed contractually, similar patterns as before emerged. The stresses on language, social, and academic development were present in both, but again, the teacher's goals of success in a regular kindergarten program were not reflected in the written document. Although the overall categories were the same, an analysis of the specific objectives within each of the respective categories illustrated how teacher's intent had not been transferred to the written document.

In terms of language, the written plan continued to contain the more specific grammatical/syntactical skills (e.g., use "could" and "would," answer who/what/when/where/why questions, use correct verb tense). Only two objectives were similar to the teacher's more general intent regarding his expressive language with other children: "to speak with appropriate volume," and "to use complete sentences during spontaneous speech." A review of the Thesaurus indicated several other objectives that might have been a closer match to teacher's stated intent, but which were not included in the contractual plan. Examples of these included:

EEB75	Contribute to adult conversation
EEB88	Join in conversation at mealtime
EEC91	Verbalize about drawing
EEC101	Tell simple jokes
EEC102	Tell daily experiences

It should be noted, however, that these were among the few, more broadly-construed expressive language objectives listed in the Thesaurus. By far, there was a preponderance of the more specific syntactical/grammatical types of skills such as those listed as in the contractual plan.

There was more congruence between the two future plans with regards to the goal that Michael engage in appropriate social behavior.

Four out of the five social behavior skills listed in the contractual plan matched teacher intent (e.g., "engages in socially acceptable behavior," "asks permission to use objects belonging to others," "plays with 4-5 children cooperatively"). The Thesaurus included several other items that also might have been included, given the teacher's statements during the interview, but which were not:

EEB45	Share object or food when requested with one other child.
EEB63	Follow rules in group game led by adult
EEB64	Ask permission to use toy peer is playing with
EEB67	Take turns

As for the preacademic area, hardly any other teacher intents were included in the contractual plan. While both plans indicated skills in the prereading area, those mentioned by the teacher were more sophisticated; the skills of the contractual plan included "putting three pictures in sequence," "matching words," "identifying different pictures or objects in a group," and "noting missing details in pictures." Nothing in the contractual plan referred to recognizing letters or numerals, counting to 20, or understanding sets of one to five that the teacher had mentioned, even though there were several appropriate items listed in the Thesaurus for these. Only the objective "learning to print name" was congruent.

In summary, while there seemed to be an ostensible match in emphasis between the future contractual and phenomenological plans, an analysis of their respective content showed a greater degree of incongruency. Except for the social behavior area, most of the teacher's intent was not reflected in the written plan. Further, there were objectives listed in the Thesaurus that might have been selected to account for the skills the teacher believed were necessary for Michael in the forthcoming year. Despite a teacher who had a year of "knowing the child" and who "knew the system," which were weaknesses the teacher believed had occurred in the initial IEP which did not prove adequate for instructional use, the same situation had occurred with the future IEP.

CHAPTER VII

THE EMPIRICAL PLAN:
DATA COLLECTION, ANALYSIS, RESULTS

To complete the investigation of a comprehensive individualized program, the impact of child behavior upon the written and phenomenological plans also needed to be explored. Just as the study of teacher plans indicated a reality greater than the contractual plan planned prior to her interactions with the child, could the same be said of the child's behavior? Or, were all responses of the child in direct response to teacher intent? These questions were central to the study of the empirical plan.

Procedures utilized to capture child behavior in the classroom, and details of how the data were prepared for analysis are described in this chapter. The nature of the overall research questions demanded that the findings of the empirical plan be related to the other two components, and the matching process developed to secure those results will be illustrated.

Data Collection

The purpose of data collection for this aspect of the study was to develop a plan which reflected the naturally-occurring program of the child-subject. Early decisions in this phase of the study included the determination of the mode of data collection, procedures to determine typicality, and desensitization of the subjects.

Selection of Data Collection Technology

Consideration of the means by which to collect data involved a recognition of the needs of the research in relation to the trade-offs posed by selection of one technology over another. Questions of appropriateness, feasibility, and practicality were not only crucial determinants, but were also interrelated in the decision-making process.

Many records of the natural habitat have been created solely from the use of field notes; Barker's early work in Midwest Field Station (1968) was characterized by the construction of specimen records from hand notes recorded *in situ* as the subjects were being observed. Later, other technological means to gather data were introduced, primarily the use of videotape recorders (Kounin, 1970) and unique to ecological psychology studies, the use of the Stenomask. Described by Schoggen (1963), the Stenomask is a portable, mask-like device which encloses a transistorized tape recorder, and is worn over the researcher's mouth and nose to allow for near-silent dictation of the events being observed. Others (Note 21) have refined the use of a hand-held microphone as a substitute for the Stenomask. All of these have been developed as different media to document the natural on-going stream of behavior of subjects and settings being observed.

The medium selected for data collection in this aspect of the study was a videotape recorder, primarily for the reasons discussed in more detail in Chapter III. A videotape recorder would be more apt to capture the most complete record of the stream of behavior, while keeping bias from selective attention of the researcher/observer to a minimum. Most importantly, the use of videotape would result in data which were easily retrievable for subsequent analysis by other analysts who were naive to the research setting; they would be privy to the fullest audiovisual depictation of the events and subjects they would be analyzing. Further, the record would be available to provide data not anticipated at the time of collection and for repeated study of the same event. Finally, there would be no training of recorders necessary, nor would there be a need to monitor an outside technician; the researcher, already familiar with the equipment as well as its features and limitations from other experiences, would operate it and create the videotape record.

Yet there were tradeoffs. Degree of obtrusiveness was high, and procedure and time for desensitization had to be considered. Mobility was sacrificed in favor of mounting the camera on a stationary tripod in the corner of the room for maximal unobtrusiveness. Loss of some data because of the positioning of people or the location of the camera had to be anticipated, although this proved to be minimal. Finally, mechanical failure might result in loss of data, either during filming or viewing. These were not unique to videotape, but did pose certain limitations on the data. Yet the benefit of a frozen record in audiovisual form outweighed these disadvantages in the decision-making process.

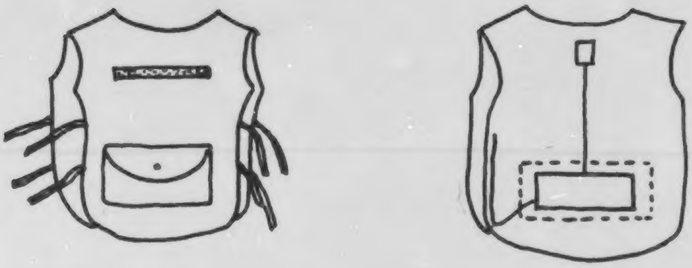
Data were recorded with a SONY AVC 3400 camera with zoom lens, mounted on a tripod, using half-inch, hour-long videotapes. A SONY AV 3650 reel-to-reel tape deck was used. During the field observation stage, options for placement of the equipment had been studied. The "front" of the room had been determined (actually the back of the room, if one were to consider first impressions of an observer and typical classroom conventions) as the area towards which most activities occurred. In addition, several unobtrusive corners of the room had been identified, where placement of equipment would allow for maximal viewing range, but least visibility to the children. After consultation with the teacher, a permanent area of the classroom was selected for placement of the equipment.

Figure 4.3 (see page 81) illustrates the positioning of the camera in relation to the classroom areas and furniture. One corner of the room was blocked off by the teachers for storage of their materials; this area was enclosed by a portable trampoline and a book shelf. By situating all the equipment inside this enclosure, minimal disruption of actual classroom space was possible; by situating the camera just outside the enclosure, alongside the bookcase, all areas of the room could be viewed with ease, except for the play kitchen area. During field observation, however, it was noted that few of the children selected this area, particularly Michael. In addition, when he did venture there, it was possible to move the camera forward to bring him into view. Moreover, snack and small group activities always took place immediately in front of the camera area.

Once the decisions about video recording were made, consideration had to be given to procedures for recording sound. Most commonly in research of this type, microphones are attached to objects or suspended from ceilings in different areas of the classroom, but the disadvantages of these standard procedures were already known: garbled sound due to the profusion of voices and other sounds in a classroom, limited range for good quality sound reproduction, and inability to follow key subjects as they moved to other parts of the room. Another possibility was the use of lavalier microphones, but the cord needed would have been too difficult, even dangerous, for an active child to manage. A wireless microphone system was determined to be the best choice, with its ability to pick up high quality reproduction of the child-subject's voice and the possibility of adapting it for ease of use with a child. A Vega wireless microphone system was rented, including a Model 77B transmitter, a Model 66 receiver, and a SONY ECM 30 microphone. This was a high quality system, similar to those used by television newscasters; its range enabled sounds to be picked up clearly from as far away as the parking lot outside the classroom.

Obtrusiveness was the major problem that had to be overcome with this choice of equipment. It was necessary to devise a way for a child to conveniently wear the microphone, and in such a way that it be hidden from view. It was decided to encase the system into a smock, and then to make "placebo" smocks for each of the other four children in Michael's small group, so that Michael would not be the only child wearing one.

The smocks were made of royal blue felt, tied at the sides, and had a pocket on the front. The transmitter was placed in the pocket of Michael's smock; in the other children's pockets, a 2 3/4 by 4 by 1 inch block of wood was sewn in to simulate a transmitter. The microphone and its wire were attached to the inside of Michael's smock, running up the front center of the smock from the transmitter, and ending just below the neckline. The microphone and its wire were camouflaged with duct tape; an additional wire, the transmitter's antenna, was sewn into the seams of the smock. Mock microphones were taped into the other children's smocks, made of caps to marking pens. Figure 7.1 illustrates how the smocks appeared, inside and out.



Outside

Inside

Figure 7.1 Construction of smocks to hold wireless microphones.

The smocks were made so that they could be used in an activity to meet some of the objectives regarding color identification the children had been working on, in order to justify their use with the children. Attached to the front of each smock was a piece of Velcro, and this was used to hold materials for a color-matching game. The game was introduced to the children by the teacher during the week before videotaping, so that they could get used to wearing the smocks and to playing the game. Two or three cardboard squares of different colors were stuck onto the Velcro strip on each child's smock; as the teacher held up a card of a particular color, the children could pull the matching color card off their smocks if they had it. The smocks were called their "special color smocks," and the children were asked to wear them on the videotaping days.

Michael had some difficulty at first. Because he was slight and the transmitter was relatively heavy, the smock tended to pull down in front, and his mobility was affected. This was repaired by attaching an inner waist tie to the smock, which stabilized the transmitter. After a day, he and the other children got used to wearing their smocks up until they left for gym. Then the smocks were removed, and the children were not asked to put them on again. Instead, Michael's was placed near him during Large Group Time; there was no problem getting a clear transmission, as those activities were relatively stationary ones. While this was the most obtrusive part of data collection, data reported in the results section indicated that Michael was able to desensitize to this device to a large degree.

Prior to the actual days selected for videotaping, several "dry runs" were made to test the video and audio equipment, the researcher's competence, and to search for unanticipated problems in collecting data during the various morning activities. Aside from the problem with the drooping smock, no other difficulties emerged. In addition, this test served as part of the desensitization process.

Desensitization

Barker admits that the presence of an observer may well change the psychological situation and hence, the behavior of the subject; he also concluded that observer interference may never be reduced to zero (Barker & Wright, 1971). Rather, the aim is to make that interference as minimal as possible. While the equipment and the researcher were obvious novelties in the classroom, use of some standard procedures for desensitization and adaptation soon enabled these "novelties" to become an acceptable, nearly invisible part of the classroom environment.

Desensitization to the researcher-observer in the classroom began during the field observation stage, not only for the teacher, as described earlier, but for the children as well. The researcher sat at a desk at the back of the room at periodic times for over a month. The role of the researcher to observe, to be "working," was re-enforced whenever children approached: the observer was friendly, not entirely unresponsive or anonymous, but after a brief acknowledgement or conversation, announced it was time "to go back to work." In this particular classroom, several days passed before any child seemed to notice or approach the observer at all; then, only a few did. The class "got used" to a foreign presence in their midst quite easily and quickly, perhaps because of the variety of adults (special service staff, volunteers, students) normally entering and leaving the room as they worked with the children. Another adult was apparently not a novelty in this particular classroom.

The situation with the video equipment was somewhat similar. The teacher suggested making as minimal "fuss" about the equipment as possible, and declined an offer to provide a class lesson on its function; she believed the children would desensitize more quickly if the event were kept low-key, and this was true.

The equipment remained in the same place over a period of four weeks. During the first week, the "test runs" were conducted. Only three of the children became interested in investigating the equipment during the entire data collection period. They watched the television screen and asked questions, which were answered. Subsequently, two of them returned each day --- Michael and his current playmate. This became somewhat of ritual for them: each day, they would come in, check the T.V., and participate with the researcher in some sort of viewing/photographing activity. Then, after a few minutes, they would leave to play with other materials. In essence, this activity became part of their morning play, and their learning as well. They progressed from recognizing that the camera was taking pictures of their room and the other children, to understanding that it could take pictures of them as they were laughing, looking, and of course, making funny faces! They saw how events that had happened in the past could be replayed, and finally, towards the last week, they grappled with the problem of being photographed in a far place of the room and being seen by the other child, yet not being able to be in both places to see their own images. Michael especially would run to a part of the room, ask his friend if he could be seen, and then quickly run back to the television hoping to see himself before the image disappeared!

The researcher's strategy was, again, to be responsive to the children, and then, after a short time, to indicate that "it was time to go to work." This same ritual occurred each of the times the researcher was present to photograph, but after several minutes, the children easily engaged in other activities. Occasionally during the mornings, they would walk by the camera and look, but then they would continue on their way. During the filming, the television screen was faced inward, and the researcher made no eye contact with the children to avoid eliciting interaction. Reports from the teacher indicated the behavior of the subject during the videotape sessions was no different from what she would normally expect; data regarding the effects of the equipment reported in the next chapter further substantiated her observations (see pages 226-227).

Preparing the Video Record

Three days of data collection were selected to record the empirical plan. These were determined towards the end of the field observation phase, in consultation with the teacher and the instructional associate. For three weeks, the Tuesday morning activities of Michael were filmed; Wednesdays were selected as back-up days in case of Michael's absence or atypical behavior, equipment failure, or changes in the classroom schedule. Videotaping occurred from 8:30-11:00, excluding Gross Motor Time (10:00-10:30), on those six days. All the Tuesday sessions resulted in complete records; sound failure and an aborted taping due to an injury to Michael all occurred on Wednesday sessions. For data analysis, the Tuesday tapes were used, and totaled six hours.

The taping was conducted by the researcher. This had the advantage of having the camera work handled by someone with an intimate knowledge of the classroom schedule, procedures and subjects, as well as the research questions. Movement, seating arrangements, and/or events could be anticipated, and closeups of material thought to be relevant to the inquiry could be taken. Its disadvantage was that not much in the order of field notes could be taken, except after-the-fact. However, when it came time to review the films, the advantage of one of having had one of the analysts present in the actual setting at the time of the recorded events was gained.

Teacher Retrospection

Following each videotaping session, the teacher and the instructional associate met with the researcher after school to view the tapes and to make comments. The purpose of these sessions was retrospection. The teacher was asked to describe what was occurring on the tape in terms of what she had intended. The results were three-fold: 1) the teacher provided information to clarify what was happening, often adding information about antecedent occurrences which she believed were related to the taped events; 2) the teacher clarified any language that had been garbled in the recording, either because of equipment limitations or a particular phraseology used by the children; and 3) the teacher corroborated by example some of her intent.

The form of this retrospection was unstructured and open-ended. The teacher responded to the entire tape rather than to samples of behavior, as has been done more currently in studies which use a similar, stimulated recall technique (McNair & Joyce, 1979). The researcher probed some segments of interest, either by stopping the tape or asking questions at the end of an activity. Teacher fatigue became very much a factor in this aspect of data collection, especially by the third day, both because of the tediousness of the process and because of the end-of-school-year demands which were pressing upon her. While the original purpose of teacher retrospection was to provide an opportunity for the teacher to assess the degree to which her intent was being carried out or thwarted in the classroom events depicted on the tapes, its purpose in practice became more one of corroboration and triangulation in the interpretation of the existent data. Each of the teacher retrospection sessions was audiotaped and transcribed for use in preparation of the videoscript.

Preparation of the Videoscript

As a result of these data collection activities for the empirical plan, three kinds of data were available for analysis: the videotape record of Michael's stream of behavior, field notes of classroom settings, and audiotapes of teacher retrospection about the taped events. Verbatim transcripts of both the video and audio tapes were prepared according to the conventions detailed in Appendix I. The task was then to relate these three types of data in a format which would lend itself to analysis.

The specimen record (Barker & Wright, 1971) provided the basic orientation for the format which was developed. Specimen records are narrative records of behavior whose aim it is "to describe molar behavior and psychological habitat" (Barker & Wright, 1971, p. 205). In traditional ecological research, the observer describes in words the behavior and situation of a subject; in this study, the recording instrument was a video camera rather than a human observer, and the problem became to transfer pictures into a verbal record for ease of retrieval of information. In addition, teacher retrospection had to be linked to relevant events on the tape. To respond to these research needs, the data were transcribed into a format called a videoscript; a sample page of a videoscript is presented in Figure 7.2.

The videoscript consisted of three parts: 1) the verbatim transcript of the audio portion of the videotape; in other words, the verbal behavior of the stream; 2) a narrative setting description of the visual events depicted on the videotape, focused upon the surround of the child-subject; and 3) a verbatim transcript of the teacher's retrospection, placed parallel to the events she described. Coupled, VIDEO DATE: Day 1

PAGE: 1

VIDEOTAPE TRANSCRIPT	SETTING DESCRIPTION	TEACHER RETROSPECTION
	Children have arrived from home and are about Free Play. T is speaking with Sam. Mic has asked T for note saying he was a "good worker" and she has just given it to him.	
Mic: I wanna see (.....) Den: Hey Michael! Michael! Mic: I'm (going to) play.	T is helping Jef open a tin box. Mic goes over to watch. Den is watching T.V. monitor.	VCP: I think this was the day you'd given them a note? T: To take home in the afternoon, already. IA: Yeah. I remember that.
T: (to child) Want to take your coat off? Hang it up?	Mic walks around towards T.V., looking at note.	
Mic: (to Den) Desch give me this. Den: My note? Mic: My note.	Mic watches screen and holds note up to T.V. screen.	
Den: Why? Mic: 'Cause. 'Cause. Den: I see Michael! Mic: (laughs, sounds)	Mic and Den make faces.	VCP: Does that glare? IA: Yeah. Kinda. She shut the light off. Maybe --- yeah, that's better.
Den: That's Mike. Mic: (to VCP) I want to see Mike again. VCP: (.....)	Mic and Den continue making faces. Mic watches Denise show her tummy. Mic asks the researcher. Researcher tells Mike she's working.	T: Oh, Denise.
Mic: I want --- I want to see more. And them go---? Mic: Hey Kim!	Mic turns to leave and sees P.E. teacher. Mic runs to Kim at door. Kim talking to T and IA.	T: Is he talking to you? Yeah. IA: Kim.
Kim: (to T) You can come in the gym and watch sometime. T: Sherrie's going to be me. Mic: Hey Sherrie--- T: I just think it's---		
Mic: Hey, Sherrie. Hey, hey Kim! Do we have gym today? Kim: (.....) Mic: Kim! Denise, Kim! T: Yesterday all day long, do we have P.E. today?		VCP: Kim is the Phys Ed--- T: P.E. (Laughter)
Mic: Do we have P.E. today? Kim: You have P.E. today. Yes. Yes, oh ---	Mike reaches for and gets a hug from Kim.	T: Mic likes a lot of reinforcement, doesn't he?

Figure 7.2. Sample Videoscript.

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parts one and two of the videoscript most closely approximated a specimen record, except behavior and setting description in the videoscript appeared in a less integrated form. When the third part, retrospection, was added, the videoscript displayed relationships among behavior, situation, and corroborative interpretations of the events. When used with the videotape, a pictorial, verbal, and audio account of classroom events existed, along with elucidating remarks from some of the actors in the setting. An approximate ratio of 12 hours to each hour of videotape was needed to move from initial transcription of the tapes to preparation of the final form of the videoscript.

Though demanding in its preparation, the videoscript was useful in several ways. Used in conjunction with the videotape, the videoscript was an aide to viewing and interpreting events, most importantly for naive analysts who had not been in the actual research setting. Used independently, it served coding purposes, and data could easily be referenced and/or cited. Finally, it currently exists as an archive of behavioral data, along with the videotapes, for future study.

Analysis of the Empirical Plan

Once the data were collected and transformed into the videoscript, the research task for analysis of the empirical plan paralleled that of the phenomenological plan. Essentially, the videoscript described a sequential stream of behavior without any reference or interruption to its parts. The next step of the research process was to delimit parts of the stream into relevant units which were germane to the research question, and to develop a system for categorization of those units. As before, criteria for content analysis were equally applicable to this task, as were procedures for unitizing specimen records from ecological research. Each demanded decisions regarding determination of the unit of analysis, the system of categorization, and the method of enumeration.

Determination of the Unit of Analysis

Using both the videoscript and the videotape recording, the data were unitized by dividing the naturally-occurring stream of behavior into units of analysis called agendas. Agendas were a type of unit that indicated the intent of the subject as related to the surrounding context. Agendas were used to describe behavior at the molar level, similar to Barker's episodes (Barker & Wright, 1971), but because of the availability of the videotape, allowed for increased specification of his criteria of constancy of direction and potency of the units.

Barker and Wright (1971) defined episodes as parts of the behavior stream which are bounded by beginning and end points, within which occur behavior that is constant in direction; each time there is a change in the direction of behavior, a new episode occurs. Secondly, episodes are molar in level, easily recognizable by the subject and others as events which occur within the normal behavior perspective; thus, they neither include events as minute as "blinking eyes" nor as global as "becoming independent." While one episode can be nested within another, Barker's third criterion provides that an episode as a whole must have greater weight or potency than any of its parts. Thus, the natural stream is segmented according to natural units that emerge from the subject's flow of behavior.

The definition of agendas paralleled Barker's criteria for definition of episodes. The specific rules for unitization have been documented in Appendix J. The beginning and end points of an agenda were defined according to a criterion of engagement. An agenda was said to begin whenever a subject became engaged with a person, event, or object in the environment; it was to end whenever a subject ceased to attend to that person, event, or object and/or moved on to another agenda. Engagement could be identified by noting changes in position, body movements, eye contact, verbal utterances, topics of conversation, and/or object usage. Within an agenda, behavior proceeded in a constant direction.

During any event, several agendas could exist. Often, agendas overlapped and/or could be enclosed within other agendas; following the definition of episodes, enclosed agendas were deemed of equal potency with the enclosing agenda. Thus, varying child intents and responses that naturally could occur in observing any one behavior or interaction were captured through a system of nested and overlapping agendas. An example of such an instance is illustrated below:

(The children are discussing various articles of clothing at the start of Circle.)

(84) Listening to conversation about clothes

T: [J], what color are [D's] shoes?
J: Oh, they're ugly.

(85) Identifying red

T: Well no, I didn't ask you that. I said what color? I think they're pretty. What color are they?
J: Red.
T: Alright! [D], where'd you get your pretty shoes?
D: Ayr-way.
T: Ayr-way, I should have known.

(86) Talking about boots

Mic: Hey, teacher, know where I get my boots?
T: Where?
Mic: At Ayr-way.
T: Ayr-way.

Agendas occurred within a context, and the nature of the data collection medium for this study allowed for the simultaneous analysis of the context surrounding the subject's behavior. A second unit, circumstances, was defined as the part of the naturally-occurring environment surrounding the subject's agendas; circumstances stimulated, facilitated, supported, obstructed, or caused changes in behavior. They were that part of the behavior stream most related to the ecological notion of behavior setting.

Circumstances also were to proceed in a constant direction, of which the subject was or became a part; circumstances could be precursors to agendas and/or could continue beyond them. Thus, in relation to any one subject, all classroom events were not identified as circumstances; only those which occured vis-a-vis the subject were marked. In this way, circumstances were similar to the environmental force units (EFUs) defined by Schoggen (1963). However, circumstances as defined in this research extended the meaning of "force" to include not only persons or things, but events at a more molar level, such as "Good Morning song" or "group conversation." In addition, circumstances were not limited to external forces; a subject could have initiated a circumstance by "calling a teacher" or "deciding to get a book from the shelf" himself.

The videotape transcript portion of the videoscript was unitized into both agendas and circumstances according to the conventions specified in Appendix J. Each agenda was bracketed, assigned a consecutive number, and given a title. Circumstances were designated with broken lines, and titled. A sample of a unitized videoscript is included in Appendix K.

Training for Unitization

The analyst team for this portion of analysis consisted of the researcher and an undergraduate student, a senior in special education. Again, initial training included a description of the overall study and an explanation of the purpose and general tasks for this phase of analysis. The research assistant viewed the three days' videotapes, observed in the classroom, and familiarized herself with the videoscripts.

Initial training for unitization was conducted with specimen records from other ecological research conducted at Indiana University. While the rules for unitizing videoscripts were slightly different, this procedure allowed the analysts opportunity to practice, clarify, and understand the basic tenets of episoding, without contaminating the research data. Standard procedures for episoding were used (see Barker & Wright, 1971). As the analysts grew in proficiency, they moved to identifying agendas and circumstances on videoscripts.

At first, a trial videoscript from the test day of data collection was used; then the analysts began to unitize the actual research data. Because of its developmental nature, the task of explicating the rules for unitization of agendas and circumstances was an iterative one. Although the primary and critical rules had been set forth prior to training, the process of training itself became a learning experience, as both analysts engaged in processes of rule formulation and rule application simultaneously during early unitization sessions with the videoscript. Each portion of the videoscript seemed to bring demands for additional rules or to test old ones. The rules set forth in the previous section and in Appendix J were the culmination of this iterative process. To assure agreement on the initial portions of the videoscript, they were re-unitized following the completion of the third day's videoscript, so that the rule set as it finally emerged was applied to all portions of the data.

Interanalyst Agreement

"Agreement" was defined as both analysts beginning and ending an agenda at essentially the same points, and entitling it with words so similar that they indicated the same intent. Of most importance was that the intent of the child-subject was kept intact during the process of unitizing the stream of behavior. The titling of the agenda indicated intent, as did beginning and ending points. The criterion for agreement of titles was that the wording used by both analysts had to be semantically identical. For instance, "talking with friend" and "conversing with Sam" were considered in agreement; "claiming chair" and "sitting down" were not. If the titles were discrepant, agreement on beginning and ending points was moot.

Because of the specificity of the verbatim transcript, some leeway was allowed in the identification of beginning and ending points, especially since length of unit was not a question in this study. Therefore, agreement was designated if analysts met any of the following conditions for beginning and ending an agenda:

1. Identical beginning and end
2. Identical beginning, end within one or two lines
3. Identical end, beginning within one or two lines
4. Beginning and end within one or two lines

The formula for estimate of accuracy was drawn from Barker and Wright (1971) to evidence extent of agreement by the two analysts:

$$\text{Estimate of Accuracy} = \frac{\text{No. of agendas identified in agreement by Analysts A and B}}{\dfrac{\text{(Total agendas identified by A)} + \text{(Total Agendas identified by B)}}{2}}$$

Approximately 10 pages of videoscript were analyzed at any one time, and estimates of accuracy were obtained for each. The estimates were compiled by day, by the various settings, and for the total videoscript, and are reported in Table 7.1.

Table 7.1
Summary of Inter-analyst Agreement
during Unitization of the Videoscript

Videoscript Segment	Estimate of Accuracy
Total Day 1 Agendas	.92
Total Day 2 Agendas	.92
Total Day 3 Agendas	.94
Total Free Play Agendas	.91
Total Snack Agendas	.93
Total Circle Agendas	.90
Total Small Group Agendas	.92
Total Large Group Agendas	.96
All Agendas	.92

As illustrated, agreement was very high. Day 1 and Circle Times appeared to be most difficult to unitize: Day 1, most probably because it was unitized the earliest; Circle Times, because they contained such complex and overlapping examples of behavior that there was difficulty coming to agreement about specificity of the contained units.

In every case of disagreement, the analyst team reconciled the differences, and a "frozen videoscript" was created on the basis of the analysts' pooled judgements, including both agendas and circumstances. Agendas were numbered. In all, 682 agendas were identified as Michael's empirical plan. These were then listed in linear fashion on columnar paper in preparation for the matching process described below; they were identified by day and behavior setting, and nested within their associated Circumstances.

The Matching Process

The research question was to determine the relationships that existed across the three components of individualization. In order to demonstrate this, a categorization system which used the natural stream of behavior as the baseline for a matching procedure was developed. In essence, each agenda was matched back to a complementary objective in either or both of the other two plans; agendas which matched neither plan were coded as non-matches. A system of enumeration and coding was designed to accomplish this. The format illustrated in Figure 7.3 is a sample of the matching process which was utilized.

Agenda	Match to Written plan	Match to Teacher Intent	Non-match
Feeling something fuzzy	*3.1*	---	---
Conversing with S	---	*2.10.2.3*	---
Inviting J to play	*2.4*	*3.2.4*	---
Drinking "coffee"	---	---	*XXX*

Figure 7.3. Sample matching procedure to compare components of individualization.

If any agenda "matched" an objective in either of the two other plans, the identifying number of the respective objective was listed in the appropriate column. Only one objective in each plan could be matched to any one agenda, for by definition, an agenda was a unit describing one behavior; several behaviors would have been unitized individually, most likely contained within each other. Each agenda, then, was assumed to describe one discrete behavior.

Analyst Training and Measures of Agreement

Two senior special education undergraduates were trained in the process of matching agendas to objectives in the contractual and phenomenological plans. These analysts were already familiar with the videotapes, the transcripts, and the phenomenological and contractual plans from their prior research assistance on the study. The analysts worked with the researcher on several sets of data until coding rules were understood and consistently applied across all three analysts. Coding was done independently, and results were compared and discussed. As with the unitization of the videoscript, the set of rules for this matching process reported in Appendix L evolved through this training period.

Once the student analysts were trained, they matched the remainder of the agendas to plan objectives. Each analyst coded independently, and then compared her results with the other. Those agendas which they could not reconcile confidently were brought to the researcher. The analysts and researcher then functioned as a three-person expert team to determine appropriate coding for the "problem" agendas. In addition, a 10% random sample of all agendas was selected, stratified by behavior setting, for review by the researcher; this set of agendas was coded independently by the researcher as well as the analysts, and was used as a criterion check for inter-analyst agreement.

Cohen's kappa was selected as a measure of inter-analyst agreement, as it corrects for chance agreement and is appropriate for two or more categories for each pair of observers; a coefficient in excess of .75 is considered acceptable for observer consistency (Frick & Semmel, 1978). Several measures of inter-analyst agreement were taken.

Cohen's kappa was calculated for a 10% sample of the coding done by the two student analysts; k ranged from .78 to .80 across the three days. On the criterion test to the 10% sample coded by the researcher, k ranged from .61 to .67 across the three days. This included both unambiguous and ambiguous items.

Frick and Semmel (1978) cited conclusions that investigators need only evidence agreement on unambiguous examples of behavioral categories shown on videotape, since "it is highly improbable that any observation system has such specifically defined and mutually exclusive categories that every behavioral event that occurs can be clearly assigned to one of its categories" (p. 162). To test this, both analysts and researcher independently identified agendas they believed to be unambiguous; kappa was calculated for those agendas which all three analysts agreed were unambiguous. These included items such as "inviting Jeff to play," "listening to teacher read sign," and "identifying turtle." On a sample of 75 unambiguous items, k was .92. Satisfied that independent ratings of unambiguous items were consistent, the analyst team functioned again as an expert panel to reconcile the ambiguous agendas and to freeze the record.

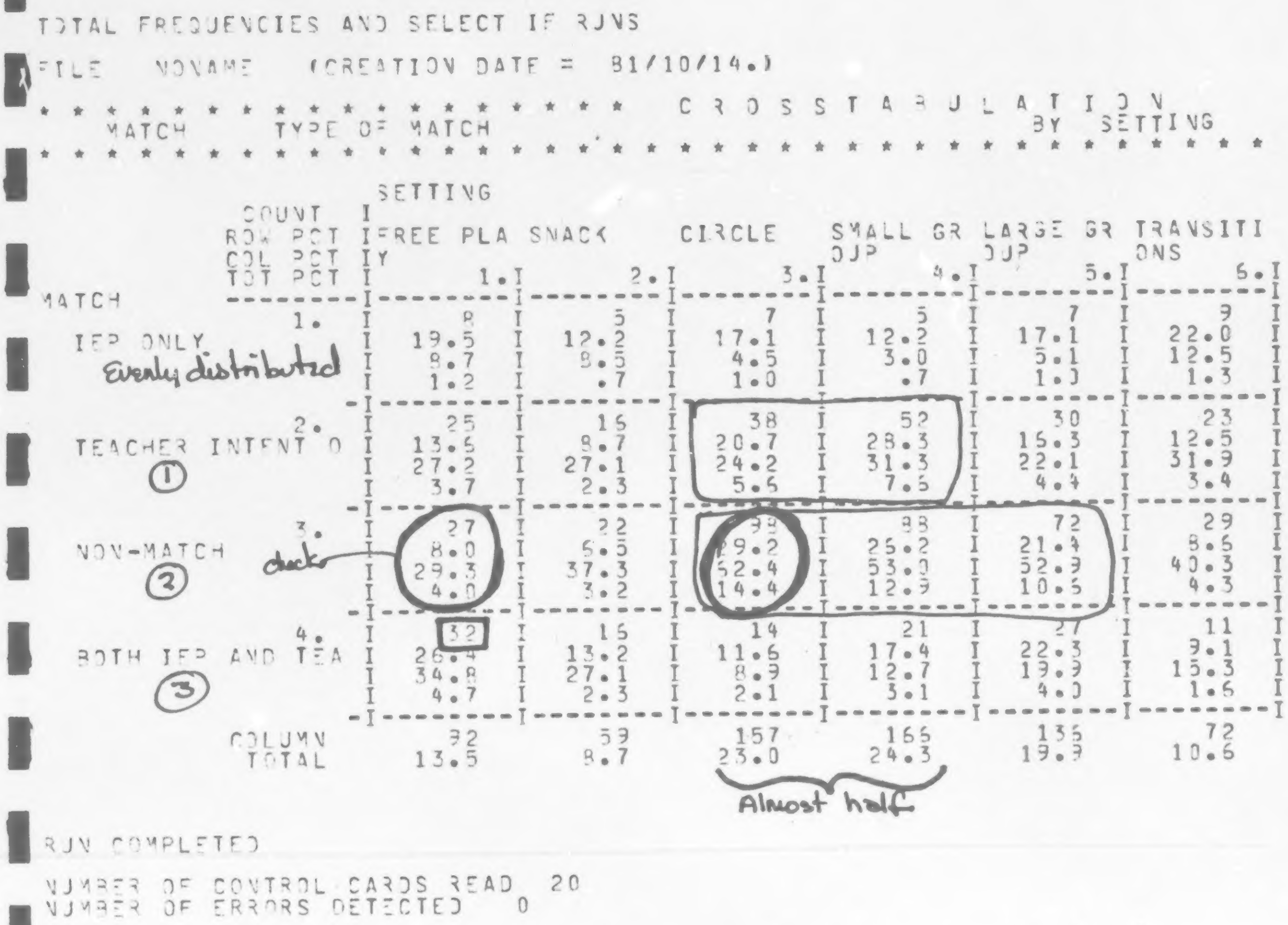
The Categorization Process

Once the agendas were coded, it was necessary to devise a strategy for sorting and categorizing them into patterns which were grounded in the data. Given the large number of agendas (682) and the permutations possible, a computerized process to sort and identify potential categories was established, using the program, Statistical Package for the Social Sciences (Nie et al, 1975).

Each agenda was considered a case and assigned an identification number. For each agenda, the following variables were coded:

1. Identification number (001-682)
2. Type of match: 1) written IEP only, 2) teacher intent only, 3) both written and intent, or 4) non-match)
3. Day 1, 2, or 3
4. Behavior setting (1-7; Free Play, Circle, etc.)
5. Contractual plan objective number, if an applicable match
6. Phenomenological plan objective number, if an applicable match

Variable labels were typed for each agenda for ease in interpreting the printout. Frequencies, cross-tabulations, in total and across variables, were computed to identify patterns which were of potential interest. The printouts were annotated as hypotheses and questions emerged. Figure 7.4 illustrates how the printouts were used to generate hypotheses of interest. Once patterns were identified, the agendas attached to them were further scrutinized, often recategorized and/or recoded to reach the findings reported in the following section.



```
TOTAL FREQUENCIES AND SELECT IF RUNS

FILE    NONAME    (CREATION DATE =  81/10/14.)

* * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N
    MATCH      TYPE OF MATCH                                   BY  SETTING
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                 SETTING
         COUNT  I
       ROW PCT  IFREE PLA SNACK     CIRCLE    SMALL GR LARGE GR TRANSITI
       COL PCT  IY                            OUP      OUP      ONS
       TOT PCT  I      1.I      2.I      3.I      4.I      5.I      6.I
MATCH           -I--------I--------I--------I--------I--------I--------I
            1.  I      8  I      5  I      7  I      5  I      7  I      9  I
  IEP ONLY      I   19.5  I   12.2  I   17.1  I   12.2  I   17.1  I   22.0  I
                I    8.7  I    8.5  I    4.5  I    3.0  I    5.1  I   12.5  I
                I    1.2  I     .7  I    1.0  I     .7  I    1.0  I    1.3  I
               -I--------I--------I--------I--------I--------I--------I
            2.  I     25  I     16  I     38  I     52  I     30  I     23  I
  TEACHER INTENT O I 13.6 I    8.7  I   20.7  I   28.3  I   16.3  I   12.5  I
                I   27.2  I   27.1  I   24.2  I   31.3  I   22.1  I   31.9  I
                I    3.7  I    2.3  I    5.6  I    7.6  I    4.4  I    3.4  I
               -I--------I--------I--------I--------I--------I--------I
            3.  I     27  I     22  I     98  I     88  I     72  I     29  I
  NON-MATCH     I    8.0  I    6.5  I   29.2  I   25.2  I   21.4  I    8.6  I
                I   29.3  I   37.3  I   62.4  I   53.0  I   52.9  I   40.3  I
                I    4.0  I    3.2  I   14.4  I   12.9  I   10.6  I    4.3  I
               -I--------I--------I--------I--------I--------I--------I
            4.  I     32  I     16  I     14  I     21  I     27  I     11  I
  BOTH IEP AND TEA I 26.4 I   13.2  I   11.6  I   17.4  I   22.3  I    9.1  I
                I   34.8  I   27.1  I    8.9  I   12.7  I   19.9  I   15.3  I
                I    4.7  I    2.3  I    2.1  I    3.1  I    4.0  I    1.6  I
               -I--------I--------I--------I--------I--------I--------I
        COLUMN        92       59       157      166      136       72
        TOTAL       13.5      8.7      23.0     24.3     19.9     10.6

RUN COMPLETED

NUMBER OF CONTROL CARDS READ   20
NUMBER OF ERRORS DETECTED       0
```

① Teacher gets most of her "work" done in Circle & Small Group.

② Michael gets most of his agendas done in Circle, Small Group, + Large Group — most <u>structured</u> settings!
How?
Nature of those agendas? (Check 27 in Free Play)

③ Congruent objectives are distributed, slightly more in Free Play.
Nature of those objectives?

Figure 7.4. Sample computer printout to illustrate emergent patterns of interest.

Results

The empirical plan was derived from an analysis of the child-subject's stream of behavior, unitized into agendas and circumstance as a means to match, sort, and then categorize Michael's intentions with respect to those of teacher intent and the written plan. The findings for the empirical plan will be presented according to type of matches coded for each of the agendas, and crossed by types of settings and objectives, as indicated in Figure 7.5.

Discussion of Type of Match	By Setting	By Type of Objectives	By Type of Agendas	By Relation to Circumstances
Overall Matches	*	*		
Agendas to Contractual Plan	*	*	*	
Agendas to Phenomenological Plan	*	*	*	
Congruent Matches	*	*	*	*
Non-Matches	*	*	*	*

Figure 7.5. Organization of the discussion regarding the analysis of the empirical plan.

Overall Matches

Over three days of data collection, there were 682 agendas identified in the videoscripts. Most occurred during Circle and Small Group; the fewest were found in Snack. Table 7.2 shows the distribution of the agendas across settings.

Table 7.2
Frequency of Agendas Across Classroom Settings

Setting	Frequency	Per cent
Free play	92	13.5%
Snack	59	8.7%
Circle	157	23.0%
Small Group	166	24.3%
Large Group	136	19.9%
Transitions	72	10.6%
TOTAL	682	100.0%

Time may have been a major factor affecting the lower frequency of agendas that occurred during Free Play and Snack. These settings generally occurred for 15-20 minutes, while each of the others were generally a half-hour in duration during the data collection days. While not originally defined as a setting, it became obvious that agendas occurred during times of transition, so the setting Transitions was included in the analyses. Transitions were defined as segments of the classroom day which occurred between the signalled end of one setting and the signalled beginning of the next. The signal was most usually a verbal remark by the teacher to begin or end a setting (e.g., singing the Good Morning Song to start Circle; telling the children to take their chairs from Circle to the Small Group table).

The agendas were somewhat evenly distributed across the three days of data collection, although the third day contained slightly fewer. Table 7.3 presents these results.

Table 7.3
Frequency of Agendas Across Data Collection Days

Data Collection Day	Frequency	Percentage
Day 1	263	38.6%
Day 2	241	35.3%
Day 3	178	26.1%
TOTAL	682	100.0%

One question of interest was whether any differential patterns emerged when type of match was considered. Table 7.4 illustrates the patterns of congruence found between Michael's behavior and the objectives planned for his program by the teacher and/or the planning team.

Table 7.4
Comparative Frequency of Types of Agenda Matches
to Various Sources of Objectives

Type of Agenda Matches	Number of Agendas	% of Agendas
Total Agendas	682	100.0%
Total, All Matches	346	50.7%
Total, Match Neither Plan	446	49.3%
Matches to Contractual Plan Only	41	6.0%
Matches to Phenomenological Plan Only	184	26.9%
Matches to Both Plans	121	17.7%
Total Contractual Matches	162	23.8%
Total Phenomenological Matches	305	44.7%

The results showed that slightly over half of Michael's activity (50.7%) related to objectives found in both teacher's intent and the written plan (see Total, All Matches). There were 346 of these agendas, approximately one-quarter (23.8%) of them matched objectives in the contractual plan and close to half (44.7%), in the phenomenological one. Some agendas matched objectives which were common to both plans and overlapped in the computation; these comprised 17.7% of the total agendas. On the other hand, the content of Michael's agendas extended beyond the phenomenological and contractual plans in 49.3% of his behavior (see Total, Match Neither Plan).

In examining the extent to which objectives in the contractual plan were being achieved, 50% of the 72 objectives listed were matched to agendas. Likewise, 49 or 67.1% of the 72 objectives in the phenomenological plan had matching agendas. Figure 7.6 summarizes these results graphically. Given the data collection sample of three days

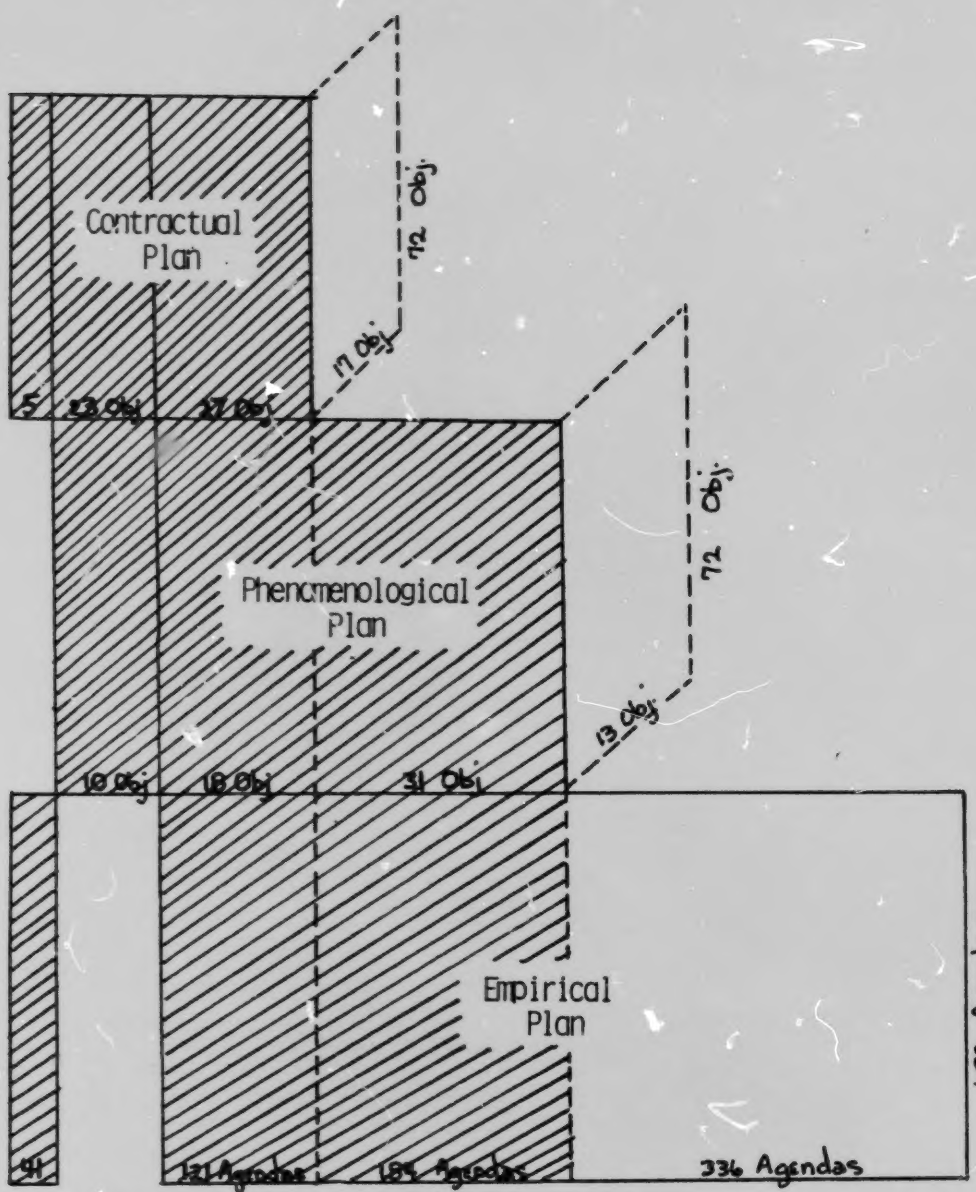

72 Obj
Contractual Plan
17 Obj
5
23 Obj
27 Obj
72 Obj
Phenomenological Plan
13 Obj
10 Obj
18 Obj
31 Obj
Empirical Plan
682 Agendas
41
121 Agendas
184 Agendas
336 Agendas

Figure 7.6. Graphic summary of the matches across various components of individualization.

selected for this study, further analyses will be limited to discussion of those objectives which were matched to agendas; for the others, differentiation between what objectives were not being implemented by the teacher and which were implemented on days other than those observed was not possible. The discussion will also emphasize those agendas identified in the empirical plan which matched none of the objectives stated in the other plans.

Matches to the Contractual Plan

In all, 162 of Michael's agendas matched some objective on the contractual plan. These accounted for 23.7% of his behavior. Of those which occurred most frequently, the top-ranked objectives assigned to Michael's behaviors included:

- Seeks out friendships with others
- Dressing skills
- Actively explore environment
- Will ask questions about persons or things
- Play with 2 or 3 peers

Most of these objective-matches reflected a proactive element in Michael's behavior --- seeking and having social interactions, initiating conversations, and exploring his classroom environment. Interestingly, most of these most frequently-matched objectives were not included in teacher intent, except for dressing skills and asking questions. However, when all 162 agendas were considered, most (74.7%) matched the objectives in the contractual plan which coincided with some intent in the phenomenological plan.

The agendas matching the objectives of the contractual plan were fairly evenly distributed across settings, as illustrated in Table 7.5, with a slight edge to activities in Free Play and Large Group.

Table 7.5
Frequency of Agendas Matching Contractual Plan by Setting

Setting	Frequency	Percent
Free Play	40	24.7%
Snack	21	13.0%
Circle	21	13.0%
Small Group	26	16.0%
Large Group	34	21.0%
Transitions	20	12.3%
TOTAL	162	100.0%

Table 7.6 illustrates the distribution of agendas by day. The first day of data collection contained the largest amount of agendas; the latter two days were nearly even.

Table 7.6
Frequency of Agendas Matching Contractual Plan by Day

Day	Frequency	Percent
Day 1	77	47.5%
Day 2	38	23.5%
Day 3	47	29.0%
TOTAL	162	100.0%

Certain types of objective-matches were predominant in the different settings, and these were consistent with the teacher's stated expected patterns of behavior for those settings. Table 7.7 presents a summary of the distribution of objectives across each setting.

Table 7.7
Percent Distribution of Agendas Matching Contractual Plan Across Settings

Objective Areas	No. Agendas	% Free Play	% Snack	% Circle	% Small Group	% Large Group	% Transition	% All Settings
Speech	23	15.0%	33.3%	4.8%	15.4%	8.8%	10.0%	14.2%
Preacademic	19	2.5%	9.5%	28.6%	34.6%	2.9%	0%	11.7%
Socialization	41	47.5%	9.5%	23.8%	3.8%	8.8%	55.0%	25.3%
Behavior	32	17.5%	14.3%	23.8%	30.8%	8.8%	30.0%	19.8%
Fine Motor	3	0%	0%	0%	11.5%	0%	0%	1.8%
Dressing	28	10.0%	0%	19.0%	0%	58.8%	0%	17.3%
Feeding	10	2.5%	28.6%	0%	0%	8.8%	0%	6.2%
Other Self-help	6	5.0%	4.8%	0%	3.8%	2.9%	5.0%	3.7%
Total	162	24.7%	13.0%	13.0%	16.0%	21.0%	12.3%	100.0%

During Free Play, Socialization objectives were the dominant match to agendas. Nearly half (47.5%) of the agendas appearing during Free Play pertained to the four Socialization objectives in the contractual plan; most matched the objectives "seeking out friendships" and "playing with another child." Similarly, the Speech objective receiving the highest number of matches during Free Play was that of "asking questions about persons and things." Of the Behavior objectives, that of "actively exploring his environment" obtained a high frequency of matches. Thus, the agendas which occurred during Free Play most frequently matched objectives which involved interaction with other persons and exploration of classroom surroundings.

During Snack, objectives regarding feeding and speech and language skills were emphasized in the matches; Speech objectives accounted for 33.3% of the matches, and Feeding for 28.6%. In the speech and language area, grammatical skills of "expressing future occurrences" and "using elaborate/extended sentences in response to a teacher initiated question" were coded most frequently. An example of such an agenda was:

Mic: Know what, [teacher]?
T: What?
Mic: I'm going to buy me a boat.
T. A boat.
Mic: Um-um.
T: [Our Aide]? (responding to a prior question from another child) Is [she] going to the lake, too? Is she?
Jef: I am, too. She's gonna meet us out there.
T: Are you, [Aide]? (Laughs) Sounds good to me!
Mic: [Teacher], are you (. . . going to play. .) boats with me?
IA: When are we going?
T: Play boats with you? You bet.

No one area predominated the objective-matches which occurred in either Circle or Small Group. Pre-academic objectives accounted for 28.6% of Michael's behavior in Circle, primarily "counting aloud," and these were always initiated by the teacher. Socialization and Behavior objectives followed closely, each matching 23.8% of the objectives. Here again, these primarily involved objectives unique to the contractual plan, most frequently those regarding "seeking out friendships with others" and "actively exploring the environment." Examples of these two types of matches included Michael's greetings to various specialist teachers or volunteers who entered the room during Circle, his manipulation of toy animals as he waited to use them during a finger play, and looking in a mirror to try to see his back during an activity where the teacher tied scarves on to the children's heads. These three types of objective-matches (counting, seeking friendships, and exploring the environment) accounted for 13 or 61.9% of all the agendas during Circle; the remainder were scattered across Dressing (tying shoes, snapping vest pocket), Pre-academic (naming a story, understanding same/different) and Speech objectives (asking a question).

As might have been expected, there was a high proportion of Preacademic objectives coded during Small Group; these comprised 34.6% of the agendas, closely followed by Behavioral ones (30.8%), primarily agendas regarding following directions for completion of a task, such as folding a paper or sorting papers from a work folder. "Counting" and "understanding same and different" were the most frequent of the Preacademic objectives coded as matching the contractual plan. In addition, Speech and Fine Motor objectives comprised 15.4% and 11.5%

of the matches, respectively. Again, "asking questions" was the most frequent of the Language objectives which appeared during Small Group.

In Large Group, by far the most frequent objectives matched to agendas were those which related to Dressing and other Self-help objectives. This was consistent with the teacher's stated purposes of Large Group (i.e., developmemt of self-help skills). Many of these matches occurred during the activities of using vests, self-help boards, and simulated meals.

During Transitions, Socialization and Behavior objectives were most frequently matched to agendas, as they were during Free Play, and comprised 55% and 30% of the agendas, respectively. "Seeking out friendships" received more matches in Transitions than in any other setting, and encounters there were more substantive encounters than simply greeting individuals who entered the room. The following is an illustration of an agenda coded as "seeking out friendships" during Transitions:

> (Michael has been intently working a Match-n-Say card. When he discovers a match, he joyfully flaps his card and shouts to the others in his small group across the room.)
>
> Mic: Hey guys. Look! Yah!
> T: Mike, go get your folder, buddy. Go get your folder.
> Mic: I got, guys.

Sometimes Michael was quite premeditated in demonstrating his friendships, such as when he realized the teacher had brought M & M's to distribute during Circle and wanted a reward:

> (Michael and another boy had just been reprimanded by the teacher as they fought over chairs while waiting for Circle to begin.)

Mic: You like me, [S]?
S: Yeah.
Mic: OK. You my friend?
S: Yeah.
Mic: Hey, [S]'s my friend, teacher.

At other times, he had less of an ulterior motive in seeking out friendships. Again, while waiting for Circle, he offered the seat next to him to one of the handicapped children, who was crawling over to join the group, and protected the chair for her from other children:

Mic: Yeh, [M]! Hey [M]! Hey, you (...Come on,...)
D: I want [M], Mike.
Mic: No! No!
T: (To [M].) No more today. OK, [M], go to Circle.
Mic: Come on, [M]! Come on! Come here, [M].

Other matches that occurred frequently during Transitions involved the "exploring the environment" objective. Activities coded here included Michael checking what other children were doing with their Match-and-Say cards and looking at materials which were sitting on a table in readiness for a subsequent activity.

In summarizing the distribution of objectives in the contractual plan, most of those related to speech and language were accomplished during Snack, consistent with the teacher's overall purpose for this setting, and during Free Play. Small and Large Groups were the next most frequent settings where Language objective-matches occurred, although at a lesser rate. Most of the Preacademic objectives were practiced during Small Group and Circle, highly teacher-directed settings; only one preacademic objective-match occurred during Free Play. Socialization matches far surpassed other types during Free Play and Transitions. Matches to Behavior objectives were most evenly distributed across all settings, whereas Fine Motor ones occurred only in Small Group. Dressing skills primarily were matched to agendas during Large Group; Feeding objectives were found during both Large Group and Snack. These, too, were consistent with the teacher's primary focus for these settings. Overall, most of the objectives of the contractual plan were met during Free Play and Large Group, particularly determined by Michael's emphasis on socialization and the teacher's emphasis on self-help skills.

Matches to the Phenomenological Plan

In all, 305 or 44.7% of Michael's agendas matched some statement of teacher intent in the phenomenological plan. Of those that occurred most frequently, the five top-ranked matches related to goals the teacher-subject held regarding language, social development, independence, and knowing what was expected in a classroom setting:

- Having respect for each other; what we do when we want something, how we approach somebody.
- Making yourself understood; initiating language, being able to have a conversation.
- To feel good about himself; self-concept, to do his own thing.
- To develop some type of listening skill.
- Being sensitive to each others' needs; caring about each other.

Except for the language skills, most of these were not included as contractual plan objectives. In other words, whereas a large majority of the objective-matches in the contractual plan were those that also matched teacher intent (74.7%), the majority of objective-matches on the phenomenological plan were those which did not coincide with objectives on the written document (60.3%).

The agendas matching the objectives of the phenomenological plan were fairly evenly distributed across settings, except for Small Group where a greater number were found. Table 7.8 illustrates this result.

Table 7.8
Frequency of Agendas Matching Phenomenological Plan by Setting

Setting	Frequency	Per cent
Free Play	57	18.7%
Snack	32	10.5%
Circle	52	17.0%
Small Group	73	23.9%
Large Group	57	18.7%
Transitions	34	11.1%
TOTAL	305	100.0%

Table 7.9 illustrates the distribution of agendas for the phenomenological plan by day. Again, the first day contained the greatest number of agendas.

Table 7.9
Frequency of Agendas Matching Phenomenological Plan by Day

Day	Frequency	Per cent
Day 1	129	42.3%
Day 2	89	29.2%
Day 3	87	28.5%
TOTAL	305	100.0%

As with the objective matches of the contractual plan, certain types of matches in the phenomenological plan were characteristic of various settings. Table 7.10 presents the distribution for Free Play.

Table 7.10
Types of Phenomenological Plan Matches Found During Free Play

Types of Objectives	% of Objectives in Setting	
SCHOOL READINESS		38.6%
Play Independently	28.1%	
Self-help	7.0%	
Other School-related	1.8%	
Listening	1.7%	
SOCIALIZATION		36.8%
Respect for Others	19.3%	
Taking Turns	8.8%	
Sensitivity	7.0%	
Self-concept	1.7%	
PREACADEMIC		24.6%
Language	22.8%	
Numbers	1.7%	

In a slight variation from the contractual plan, where socialization skills were the dominant objective-match during Free Play, school readiness as well as socialization objective-matches took precedence in the phenomenological plan. A large number of Michael's agendas during this time included playing independently (28.1%) and using language (22.8%). During this time, Michael generally played alone, with toy trucks or campers, or in parallel to other children, with beads or bean bags. He had conversations with both adults and children, as illustrated in the following two excerpts:

> (Michael is talking with the teacher during Free Play.)
>
> Mic: I be six.
> T: You're going to what?
> Mic: I'm gonna be --- I'm going to kindergarten.
> T: You're going to kindergarten? You are next year. That's right.
> T: Michael, . . . we'll miss you.
> Mic: Hey, [Aide], know what? I'm going to kindergarten.

IA: Um-hm. You're going to kindergarten next year, aren't you?
Mic: Yeah.

(Mike is trying to string beads, parallel to [S] and [J]

Mic: I make me a snake. (What's) making?
J: What you making, [S]? You making.
Mic: What's you making, [S]?
J: [S], put it on.
S: I got it.
J: Hey, Let's try this one, this side. Let's just try this.
Mic: Yeah. Look, guys. (Laughs) This is (for) Mike, you guys.

Beyond language, very little of the teacher's intent for other preacademic skills occurred during Free Play, except for numbers (1.7%). This was consistent with the findings in the contractual plan. Finally, the other major objective-match during Free Play involved "respectfully asking for information or assistance," in the area of caring about each other; these comprised 19.3% of the Free Play agendas.

Table 7.11 summarizes the types of objectives accomplished during Snack.

Table 7.11
Types of Phenomenological IEP Matches Found During Snack

Types of Objectives	% of Objectives in Setting	
PREACADEMIC		37.5%
Language	34.4%	
Numbers	3.1%	
SOCIALIZATION		37.5%
Respect for Others	15.6%	
Sensitivity to Others	12.5%	
Self-concept	6.2%	
Taking turns	3.2%	
SCHOOL READINESS		25.0%
Self-help	21.9%	
Other School-related	3.1%	

Snack was characterized by a large proportion (34.4%) of language objective-matches, as it was with the contractual plan. Michael's activities included a few responses to teacher-directed questions about the food being distributed, but also, as before, involved some extended and self-initiated conversations. For example:

> (Michael opens a conversation with the Instructional Associate during Snack.)
>
> Mic: (to IA) Hey, hey! Know Popeye eat spinach?
> (a snack another child is eating)
> IA: Popeye eat spinach? Mm-hm.
> Mic: He build his muscles.

Socialization objectives as a whole also dominated the Snack setting; these primarily involved intentions of the teacher not included in the contractual plan, and occupied 37.5% of the agendas of this setting. "Asking for assistance," primarily with food, occurred at a frequency of 15.6%. The other largest type of objective-match involved "being helpful to other children," especially to one girl. A favored activity during Snack was for one child to be selected as her helper, and to use a communication board to encourage her to name the food she wanted for Snack. For Michael, being helper was one of his favorite roles:

> (Michael approaches the Snack table before the start of Snack.)
>
> Mic: Hey, Teacher. Where's my chair? I want chair. I want to help [M].
> T: You want to help [M]?
> Mic: Yeah.
> T: OK. Well, (...chair) right here.
> Mic: I want to help [M]...Teacher, get that, get that [M]'s board. [M]'s board.
> T: I'll get [M]'s board, OK.

Table 7.12 summarizes the distribution of matches during Circle.

Table 7.12
Types of Phenomenological IEP Matches Found During Circle

Types of Objectives	% of Objectives in Setting	
SOCIALIZATION		38.5%
Groupness	11.5%	
Respect for Others	11.5%	
Sensitivity to Others	9.6%	
Taking turns	5.9%	
PREACADEMIC		32.7%
Language	13.5%	
Numbers	9.6%	
Other Preacademic (opposites)	9.6%	
SCHOOL READINESS		28.8%
Listening	13.5%	
Working Independently	5.8%	
Self-help	5.8%	
Playing Independently	3.7%	

A majority of the agendas which occurred during Circle were matched to socialization and preacademic objectives, at 38.5% and 32.7%, respectively. This was similar to the pattern found in the contractual plan. The preacademic skills that occurred here, however, were more distributed than they were during Snack, where there had been a heavier concentration in the language area. During Circle, language objective-matches occurred only at a rate of 13.5%; other preacademic skills received slightly more attention, particularly opposites and numbers (each at 9.6%).

Likewise, Circle agendas relating to objectives in socialization were also distributed across several objectives, primarily "getting the idea of group" (11.5%), "asking for help" (11.5%), and "being sensitive to others" (9.6%). The opening and closing songs of Circle contributed to developing a sense of groupness, as confirmed during teacher interviews. Michael initiated most of the helping activities, and listened to exchanges such as the following, which were coded as "learning to be sensitive to other children's needs:"

> Child: [J] doesn't talk very well.
> T: Well, he can talk pretty well. It seems like when he first comes in, he's a little shy. (94)

Table 7.13 summarizes the distribution of matches found during Small Group.

Table 7.13
Types of Phenomenological IEP Matches Found During Small Group

Types of Objectives	% of Objectives in Setting	
PREACADEMIC		50.7%
Fine Motor	17.8%	
Labeling	13.7%	
Language	9.6%	
Other Preacademic	5.5%	
Numbers	4.1%	
SCHOOL READINESS		30.1%
Handling Materials	15.1%	
Listening	9.6%	
Other School-related	2.7%	
Playing Independently	1.4%	
Self-help	1.3%	
SOCIALIZATION		19.2%
Respect for Others	6.8%	
Self-concept	6.8%	
Taking turns	2.8%	
Sensitivity to Others	2.8%	

As with the contractual plan, over half of the agendas in Small Group matched highly preacademic objectives (50.7%), with an emphasis here on fine motor activities (17.8%) and labeling colors, numerals, and textures (13.7%). Next, independence/school readiness objectives comprised a large portion of the matches during Small Group (30.1%), with most of Michael's agenda relating to "handling school materials," primarily his folder and work papers (15.1%). Listening skill matches comprised another 9.6% of the agendas. The overall area of socialization matched to 19.2% of the agendas, and the objectives included there were fairly evenly dispersed except for "getting the idea of group," which did not appear at all. "Asking for materials" and "receiving praise" were the most frequent socialization matches, and are illustrated in the following excerpts:

1) Mic: Am I doing good?
[J]: You're doing good.

2) T: O.K. I think a good worker today was Michael, so I'm going to let him have this one and then I'm going to get one for the rest of you because you all are good workers.

Table 7.14 illustrates the distribution of types of objectives matched during Large Group.

Table 7.14
Types of Phenomenological Matches Found During Large Group

Types of Objectives	% of Objectives in Setting	
SCHOOL READINESS		50.9%
Self-help	38.6%	
Other School-related	5.3%	
Listening	3.5%	
Working Independently	1.8%	
Playing Independently	1.7%	
SOCIALIZATION		38.5%
Self-concept	10.5%	
Sensitivity	10.5%	
Respect for Others	10.5%	
Taking turns	7.0%	
PREACADEMIC		10.6%
Language	8.8%	
Labeling	1.8%	

In Large Group, over half of the agendas matched to objectives in the independence/school readiness area (50.9%), and nearly all involved self-help skills (38.6%). Because of the nature of the activities in this setting, this finding was consistent with the matches on the contractual plan for agendas dealing with the use of self-help vests and boards. An additional 38.5% of the agendas found in Large Group were linked to socialization, again dealing with "self-concept," "being sensitive to the needs of others," and "asking for assistance," each at 10.6%. Only a total of 10.6% of the agendas involved Preacademic objectives, and those dealt principally with language and naming right and left.

Table 7.15 depicts the distribution of objectives during times of transition.

Table 7.15
Types of Phenomenological Matches Found During Transitions

Types of Objectives	% of Objectives in Setting	
SOCIALIZATION		50.0%
Self-concept	20.6%	
Sensitivity of Others	17.7%	
Respect for Others	8.8%	
Taking turns	2.9%	
SCHOOL READINESS		47.1%
Other School-related (make transitions, run errands)	20.6%	
Playing Independently	14.8%	
Listening	5.9%	
Working Independently	2.9%	
Handling Materials	2.9%	
PREACADEMIC		2.9%
Language	2.9%	

Transitions were important times for learning in the areas of socialization and independence/school readiness; those types of objectives were matched to 50.0% and 47.1%, respectively, of the agendas during morning transition periods. Here, most frequent objective-matches included "being able to make transitions" and "running errands" (20.6%), "receiving praise" (20.6%), and "being sensitive to the needs of others" (17.7%). It was here also that such activities as "putting materials away," "attending to a task," and "listening skills" were practiced. Only one of the agendas related to the preacademic area, that of language.

When all the types of objectives were ranked across the total settings, the teacher's emphases were illuminated; Table 7.10 presents these data. In summarizing the agendas that matched to objectives found in the phenomenological plan, there was a fairly even distribution of objective types, although most of the highly-ranked ones were in the areas of socialization and school readiness; 36.7% of the agendas matched objectives in the area of independence/school readiness, 34.7% in social development, and 28.6% in the preacademic area. Most highly ranked areas included language, self-help, respect and sensitivity to others, comprising nearly half of the matches.

Overall, the patterns found in the phenomenological plan were similar to those found in the contractual plan, with differences showing up when objectives unique to one or the other were coded. The teacher's language objectives, as well as those of the written plan, were mostly accomplished during Snack and Free Play. Most of her preacademic objectives were accomplished during Small Group, then during

Table 7.16
Ranking of Types of Phenomenological Plan Matches
by Frequency of Occurrence

Types of Objectives	% Across All Settings	Area
Language	14.4%	Preacademic
Self-help	12.1%	School Readiness
Respect for Others	11.8%	Socialization
Sensitivity to Others	8.9%	Socialization
Playing Independently	8.2%	School Readiness
Self Concept	6.9%	Socialization
Listening	6.2%	School Readiness
Taking Turns	5.3%	Socialization
Other School-related	4.6%	School Readiness
Fine Motor	4.3%	Preacademic
Handling Materials	3.9%	School Readiness
Naming	3.6%	Preacademic
Numbers	3.3%	Preacademic
Other Preacademic	3.0%	Preacademic
Groupness	1.9%	Socialization
Working Independently	1.6%	School Readiness

Summary by Area:

School Readiness	36.7%
Socialization	34.7%
Preacademic	28.6%

Snack and Circle. As in the contractual plan, few preacademic objective-matches other than language ones occurred during Free Play. "Taking turns," the teacher intent statement that most nearly coincided with the interactive intent of the socialization objectives in the contractual plan, occurred across all settings at a small rate, a pattern differing from the contractual plan where social interactions were found primarily during Free Play and Transitions, and at higher percentages. However, this could be explained by the more limited definition of taking turns and the teacher-direction involved in events coded that way in the phenomenological plan. Fine motor activities occurred only during Small Group, again similar to the contractual plan; likewise, teacher intent as well as written objectives for self-help skills occurred primarily in Large Group and Snack.

Independence/school readiness objectives, those most different from the contractual plan except for the self-help skills the teacher included under this rubric, were found at their highest rates during Free Play and Transitions. "Being sensitive to the needs of others" occurred evenly over all settings except for a lower rate during Small Group. Michael requested, though not always "respectfully," assistance (11.0%) across all of the settings, and especially during Free Play and Snack.

Congruent Matches

The data were also analyzed to identify patterns for objectives which were common to both contractual and phenomenological plans. For instance, the following agenda was coded as matching objectives in both plans: "initiating a conversation" on the phenomenological plan and "asking questions" on the contractual plan, both language area skills:

Mic: [Teacher, Teacher]. Got a --- got my toys?
T: Do I have your toys?
Mic: (shakes head yes, then no).
T: No . . . what toys?
Mic: My . . . my little one.
T: Did you bring it to school?
Mic: (nods yes)
T: Oh, Michael, I'm not sure I do. What, that little car fron Sambo's?
Mic: (nods yes) Cracker Jacks. In Cracker Jacks.
T: Oh, In Cracker Jacks?
Mic: (nods yes)
T: I'm afraid not, I'm afraid it got (.....)

More unambiguous agendas, such as eating a cookie, putting shoes on, working form puzzles, showing "two" or "three" also were coded as agendas which matched both types of plans.

Of the 162 agendas matching the contractual plan, 121 or 74.7% were congruent to objectives on the phenomenological one. For the phenomenological plan, the percentage of congruence was less: of the 305 agendas matched to the phenomenological plan, the 121 matches which matched objectives on the contractual plan comprised 42.62% of teacher intent. In other words, while a large proportion of contractual plan objectives were contained in teacher intent, these congruent matches accounted for less than half of teacher intent. Because of the high percentages of overlap, however, the patterns of the congruent objective-matches were similar to those found for the contractual and phenomenological plans in their entirety.

The data were also analyzed with regards to matches where an objective matched one type of plan but not the other. On the contractual plan, 41 or 25.3% of the agendas matched objectives which were not congruent to teacher intent. Two of these objectives comprised 31 of the matches: "actively exploring environment" and "seeking friendships." The former was evenly distributed across most settings with the exception of Snack and Large Group. Seeking friendships occurred most frequently during the more unstructured settings of Transitions and Free Play. Other congruent objectives of this type included setting and clearing his place at the table and hygiene activities, most of which occurred during Snack and Large Group.

A larger proportion of the objectives on the phenomenological plan did not occur in similar fashion on the contractual plan; 184 or 60.3% of the agendas related uniquely to teacher intent. These included the objective-matches in the independence/school readiness and socialization areas overall, and objective-matches in more specific areas such as labeling, fine motor, and engaging in conversations. However, these objectives were so distributed that the patterns described for the phenomenological plan as a whole held for them as well.

Therefore, no significant new patterns in the distribution of the objective-matches by setting were found in the analysis of these subsets. However, one finding suggested that while two objectives were stated on the contractual plan only, Michael was achieving them both without presumed teacher intent and without teacher involvement. These could be classified as self-generated objectives because of the patterns indicating lack of teacher direction and/or intervention in their accomplishment.

Non-Matches

The final category of matches to be discussed, and one which held considerable interest for the discovery of other self-generated objectives was that of non-matches; i.e., those of Michael's agendas which matched neither the contractual nor the phenomenological plans. Of all the agendas, 321 were coded as non-matches; that is, those which were different from the objectives stated in the written or teacher's plans either by level or topic, or which extended beyond the skills listed as new objectives.

These non-matches, where Michael's behavior went beyond the stated objectives of his program, occurred primarily during Circle, Small Group, and Large Group, the more structured of the settings. The non-matches in those three settings accounted for 77% of the distribution. Table 7.17 presents these findings.

Table 7.17
Frequency of Non-Match Agendas by Setting

Setting	Frequency	Percent of Non-Matches	Percent of All Agendas
Free Play	27	8.0%	29.3%
Snack	22	6.5%	37.3%
Circle	98	29.2%	62.4%
Small Group	88	26.2%	53.0%
Large Group	72	21.4%	52.9%
Transitions	29	8.6%	40.3%
TOTAL	336	100.0%	100.0%

Even by doubling the other settings to roughly account for differences in time, the pattern prevails.

An analysis of non-match agendas by day brought to light some differences. Here, the first day did not predominate as it did for the other matches; Day 2 included the highest proportion of objectives. When comparing the frequency of non-matches by day with all 682 agendas, most of Michael's activities on the second day of data collection went beyond the stated objectives; the smallest proportion occurred on Day 1. This lends some additional support to the suggested research effect, that on the first day of data collection, the teacher was attempting to assure that classroom activities matched stated objectives. Table 7.18 summarizes these findings.

Table 7.18
Frequency of Non-Match Agendas by Day

Day	Frequency	Percent of Non-Matches	Percent of All Agendas
Day 1	112	33.3%	42.6%
Day 2	142	42.3%	58.9%
Day 3	82	24.4%	46.1%
TOTAL	336	100.0%	100.0%

The 336 agendas coded as non-matches were sorted into categories and then analyzed for setting characteristics. Table 7.19 illustrates the result of the categorization. The largest set of categories, while not directly or explicitly related to objectives and therefore not matched to them, provided information regarding Michael's classroom style. This category included nine subgroups entitled Watching/ Listening, Waiting, Random Behavior, Inappropriate Behavior, Noticing, Asking for More, Teasing, Choosing, and Giving/Seeking Affection, in order of their frequency. These agendas comprised 53.3% of the non-matches.

The most frequent of this set, and of all the subgroups, was Watching/Listening; its 60 agendas accounted for one-third of those

Table 7.19
Categories of Agendas Which Matched
Neither Contractual nor Phenomenological Plans

Non-Match Category	Frequency	Percent
Classroom Style	179	53.3%
Watching/Listening (33.5%)	60	17.8%
Waiting (17.3%)	31	9.2%
Random Behaviors (11.7%)	21	6.2%
Inappropriate Behaviors (9.5%)	17	5.1%
Noticing (7.3%)	13	3.9%
Asking for More (6.7%)	12	3.6%
Teasing (6.7%)	12	3.6%
Choosing (3.9%)	7	2.1%
Seeking Affection/Attention (3.4%)	6	1.8%
Extensions of Objectives	100	29.8%
Naming (33.0%)	33	9.8%
Pretending (26.0%)	26	7.7%
Related Concepts (16.0%)	16	4.8%
Other Fine Motor (16.0%)	16	4.8%
Reading (9%)	9	2.7%
Miscellaneous Behaviors	57	17.0%
Group Participation (38.6%)	22	6.5%
Use of Materials (31.6%)	18	5.4%
Being Assisted (17.5%)	10	3.0%
Miscellaneous Agendas (12.3%)	7	2.1%
TOTAL	336	100.0%

indicating classroom style and 17.8% of all non-match agendas. The criterion for agendas to be classified as Watching/Listening was that Michael's primary behavior in the agenda include an activity from which he was diverted by some visual or aural event; he was not to be coded in this manner if his primary behavior was that of waiting. The large number of agendas in this category complemented field observations that a dominant characteristic of Michael's classroom behavior as a whole was that of intense interest in the activities surrounding him. At times, this interest was demonstrated by his watching and listening to teachers or to what other children were doing: he would listen to the teacher direct her instructional associate or classroom volunteer, speak with the school psychologist, or gather work materials; he would watch other special services teachers come into the classroom and pick up children. By doing this, he may have gained a picture of adult roles in the classroom. For instance, in one exchange, he listened to the teacher instruct a volunteer:

> T: [C] really should get up. I really don't want her to sit. If you get her back here at this table, she'll probably find something to play with. She doesn't need to sit right now.

By watching the teacher, he also learned classroom procedures and standards. He saw children disciplined for hitting, for tearing up work, or for not paying attention; he heard children praised for counting correctly, and for "being good." He saw the teacher demonstrate models of sharing and resolving problems as she intervened with other children. He learned how to use materials and saw the teacher reading and writing.

Michael watched other children, as well. Often, it was simply noting what a child was doing such as sitting on the potty, working self-help boards, or tracing. Yet he watched children to get ideas for himself, too. He saw them tease, make C.B. radios from bristle blocks, or tie scarves around their heads. Often, he followed suit. He watched children at work and perhaps learned or reinforced learnings from them, in instances where one child identified colors, another asked about telling time, and others named body parts or the ABCs. He saw other children being helpful to their classmates: one helping another talk or keeping someone from sucking her fingers.

There were no new learnings or extensions of learnings demonstrated in this category. Rather, many of the teacher's interventions and interactions with other children and adults served to further her intentions for Michael, primarily because he was so attentive to her and to his surroundings.

The second largest proportion of agendas in this set called Classroom Style was classified Waiting; of the non-matches, 31 or 9.2% were coded as Waiting. These agendas indirectly provided feedback about Michael's behavior regarding two explicit objectives. He demonstrated an ability to exercise self-control in a variety of situations: waiting for a group or activity to begin, waiting for directions. These provided indirect evidence regarding his achievement of the objective on the phenomenological plan concerned with his ability to make a transition, either between settings or between activities within a setting. Some of these "waiting" behaviors implied his patience in waiting for a turn, another teacher intent: waiting to paste, to frost a cookie, or for others to finish. Through these indirect measures, there emerged some evidence to evaluate Michael's skill in these school readiness, behavioral areas, without direct instructional activities by the teacher.

Random Behaviors, another subset of Classroom Style included 21 agendas, or 6.2% of all non-matches. This subset included agendas entitled wandering, crawling around, making car noises, fiddling with wire, and the like. These were behaviors which seemed to have no overt purpose or to be tied to any other direction of behavior; they were generally of limited duration. However, these agendas provided some evidence regarding the high extent of Michael's goal-directed and/or on-task behavior during the data collection period. Of the total units of Michael's stream of behavior over three days, only 3.1% of them were classified "random." Most occurred during Large Group, where these appeared regarding keeping his position with the group seated on the floor (e.g., crawling around, looking for a place to sit) and playing with eating utensils (e.g., banging a plate, fiddling with utensils). Next most frequent settings were Free Play, Circle, and Small Group, where such behaviors as wandering, fiddling with loose wire making noises, and clapping were coded. Only two occasions of "wandering" about the room were noted, one in Free Play and the other during a Transition.

Another similar subset of the Classroom Style category was entitled Inappropriate Behaviors, within which 17 or 5.1% of the non-matches were included. Agendas were coded into this category if they were illustrations of some obviously negative social interaction, usually signaled by a reprimand or a move to intervene by the teacher or another adult. Examples of this type of agenda were dumping a child's can of clothespins, pulling a table apart, knocking over blocks, or negating a child's offer of friendship. In fact, most of these agendas did occur with children, and only a third were directed at materials only (e.g., banging a plate). These types of agendas were fairly evenly dispersed throughout the settings, but when directed toward children, generally involved those from his small group plus another boy. However, the relatively small ratio of these types of behaviors in comparison to all agendas evidenced the extensive pattern of socially-acceptable activities in which Michael engaged during the three days observed.

The remainder of the categories in this set provided information regarding style of interaction. A category entitled Noticing emerged to account for instances where Michael recognized something new or different in the setting; these were differentiated from watching behaviors by their intensity and unexpectedness, as in instances of when he discovered "errors" in activities surrounding him. He was first to notice a mistake in the papers in his group's folders and that wrong props had been distributed for the Grandpa poem. He was ready with an answer to the teacher's questions regarding who hadn't been sung to or who had been left out of the Good Morning Song. He would spontaneously point out the "red pop" awaiting the children in Snack, or M & M's sitting in the teacher's materials box before Small Group. These types of behaviors accounted for 3.9% of the non-matches. Most of these occurred during Circle and were prompted by teacher questions; however, nearly half of all the agendas in this category were self-initiated.

Michael enjoyed many activities during the morning and would frequently ask for more or for an additional turn; another 3.6% of the non-matches were therefore coded into the subset Asking for More. Most occurred during Small Group, where he wanted to continue more academically-oriented activities: puzzles, hammering, a Match-and-Say card, and to be the teacher. Other agendas in this category included requests for more juice or M & M's, to watch the television set longer, and to see himself in the mirror again. These gave additional indication of his strong interests in the activities of the preschool program, especially the directed ones.

Teasing was a subset of Classroom Style into which Michael's more mischievous behaviors were coded. The teacher was generally the recipient of such agendas as hiding materials to be returned to her or tossing/throwing materials back to her with a laugh; hence, most of these agendas appeared during the Small and Large Group sessions. Occasionally, he would tease the other children, by keeping toy animals from them, hiding someone's shoe, and keeping a Match-and-Say card out of a child's reach. This category included 12 or 3.6% of the non-match agendas.

Throughout the three days of data collection, Michael was given an opportunity to make a choice in a structured situation seven times. These behaviors were coded into the category entitled Choosing; except for choosing an action for the group to follow in Circle, all the agendas occurred during Small and Large Group sessions. They included choosing colors of form puzzles to work on, bracelets to wear, and children for the next turn. All but one, where he tried to choose a hat by himself, were in direct response to a teacher prompt.

The final subset under the Classroom Style category was labeled Seeking Affection/Attention. There were occasional instances (6) of

Michael going to sit on the teacher's lap, hugging the physical education teacher, and kissing a picture of a cat. Two instances were coded as interactions thought to be for the purpose of drawing attention to himself. This category provided another measure of Michael's level of independence.

Thus, the nine subsets of Classroom Style provided further descriptive information regarding Michael's behavior in the classroom. They gave indication of his goal-directedness, his alertness, his interest in classroom learning activities, and his playful, teasing nature. They also showed he did not unduly seek attention or affection, nor did he engage in a large proportion of inappropriate social interactions. Finally, there was also some indication that he did not receive much opportunity for making choices, at least in teacher-directed activities.

The second largest category of non-matches which emerged was entitled Extensions of Objectives listed in the contractual and phenomenological plans. Agendas were grouped in this area when they related to stated objectives on either of the other plans, but differed in level of skill (e.g., copying rather than tracing) or in content application of a skill (e.g., naming animals rather than colors or textures). Agendas that indicated new skills, not mentioned in the other plans, were also included in this category. Of the non-matches, 100 agendas or 29.8% comprised this category. It was subdivided into five subsets to reflect with more clarity the patterns that emerged: Naming, Pretending, Related Concepts, Other Fine Motor, and Reading.

One of the more stringent differentiations applied to the matching process resulted from the teacher's clarification of her usage of words such as "identify" and "name," as previously noted in Chapter VI. Although she used those words interchangeably in both the contractual and phenomenological plans, it was her interpretation upon probing and retrospection that the intent of her statements was the same: the skill Michael was to achieve was that of identifying something, given a cue. For instance, the teacher statement would contain the identifier, "Give me the red one" or "Show me five" as opposed to the more sophisticated knowledge required in response to statements such as "What is this color?" or "How many are here?" Responses to the latter condition were considered indicative of the skill, naming; for the former question, the lower level skill was considered to be one of labeling, the teacher's stated intent. As a result, 33 agendas were coded as illustrating the higher level of objective (not intended by the teacher), events where Michael named colors, textures, and shapes without receiving a cue from the teacher question. In turn, only 11 other agendas were coded as "labeling," and thus matched contractual and phenomenological plan objectives. Therefore, while Michael was dealing with colors, textures, numbers, and body parts, he was going beyond the other plans and working at a more sophisticated level. Most revealing, however, was the fact that the teacher, in all instances, asked questions that provided no cue, thus eliciting the higher level behaviors exhibited despite her stated procedures.

Of the remaining subsets of Extensions, the second most frequent was Pretending. There were 26 or 7.7% of the non-match agendas where Michael exhibited some type of role-playing behavior. Many of these agendas occurred in Circle in conjunction with songs and fingerplays: pretending to be scared like Miss Moffitt, or mad, or sad. As such, these were considered teacher-initiated because she set the context for the children's responses. Other pretending agendas were also considered established by the teacher because she supplied the materials: playing "airplane" or "C.B. radio" with bristle blocks, manipulating sock puppets, or putting on knit ski caps to become "monsters."

Others of these agendas, however, were initiated by Michael. Some were spontaneous and quick expressions during other class activities: pretending to be Superman during a scarf activity, greeting a child wearing glasses as "Grandma" prior to a poem recitation, and naming his rectangle drawing as a "house." Those which extended for the longest periods of time occurred in unstructured settings in the absence of teacher intervention: pretending to fish and washing dishes; still another, coded primarily as playing with a peer, involved role play in the kitchen areas.

Pretending or role play was an objective not at all mentioned in the written plan nor in the teacher's intent. Teacher behavior showed that it was somewhat supported in practice, primarily in the form of fingerplays and simulated training experiences in dining. More critical, however, is the direction Michael took in initiating most of these behaviors, and at a more sophisticated level, during his classroom program. Despite the structure emanating from the adults in the classroom, part of which accounted for the occurrence of pretending behavior in 11 of the agendas in that category, Michael or another child generated role-playing opportunities for the remaining 15.

The category Other Concepts extended categories on the written and phenomenological plans which aimed to develop skills regarding the recognition of colors, textures, shapes, and the like. In practice, the teacher encouraged the labeling of more naturalistically-occurring items as well: clocks and twins, for instance. She also worked to develop an understanding of the function of objects such as napkins, socks, scarves and animals. Two other agendas initiated by the teacher were sequences intended to foster understanding of directional prepositions, such as over, under, and behind, through the use of scarves and puppets. While eight of the 14 agendas in this group were implemented by the teacher despite their absence in the contractual and phenomenological plans, Michael also generated five agendas in this category: he asked for names of more animals and demonstrated an ability to differentiate between goat and cow, and boots and shoes. Again, this category illustrated another instance of Michael taking a more proactive role in developing his program as well as examples of implicit teacher plans.

In the subset Other Fine Motor, additional agendas varied in content from what was stated on the other plans. In these non-matches, Michael scooped, poured, stacked, tied and untied, clipped and unclipped, and folded. In addition, he constructed an airplane with bristle blocks. The skills listed on the other plans limited desired behaviors to copying, tracing, drawing and printing, cutting, using paper clips, unscrewing nuts and bolts, and creasing paper. Again, however, all of these non-matches were initiated by the teacher. Therefore, though not articulated in her plans, the teacher nonetheless implemented these skill objectives into her program.

The final subcategory of Extended Objectives involved reading skills. Michael engaged in such activities as reading labels on folders, recognizing his and others' names, reading letters on a child's tee-shirt, and wanting to "say" something on paper. Six of the nine agendas in this category were initiated by Michael, illustrating his growing knowledge of meaning behind symbols. In addition, of the three agendas which matched the reading objectives included in the written plan and teacher intent, Michael initiated two of them, providing an indication of his movement towards reading beyond teacher plans and practice.

In summarizing the category Extensions of Objectives, which accounted for 29.8% of the non-matches, a bimodal pattern emerged. Many of the situations in which the agendas occurred were established by the teacher, indicating that a proportion of her behavior extended beyond what she purported to achieve. On the other hand, a significant proportion of the agendas were instigated by Michael without teacher intervention, and indicated his ability to work at skills and to be involved in content that went beyond the expectations of the teacher and the planning team. A later section will analyze this finding in relation to the contractual plan for the subsequent school year.

The remainder of the non-matches were related to random or Miscellaneous Behaviors, which were not clearly related to particular objectives, and as such, of minimal interest in this study. These included the four subcategories entitled Group Participation, Use of Materials, Being Assisted, and Miscellaneous Agendas; each comprised less than 7% of the non-matches, 17% in total, and 8.3% of all 682 agendas.

Group Participation was coded for those agendas indicating Michael's response to a group activity such as taking a bow, doing poem actions, and putting hand puppets on and off. Also coded in this category were activities of putting foam blocks on his feet and walking around with them, one day's task in Large Group, and moving furniture to an activity table. The subset entitled Use of Materials included agendas such as receiving more paper to cut, getting a pin, closing the door, and 13 cleaning-up behaviors. Being Assisted included agendas where something was done to Michael without his initiation, such as the teacher tying on a scarf or piece of string, and pinning a note on him. It also included two agendas of being hugged by another child. Finally, the subset Miscellaneous Agendas included seven agendas which were not easily classified into any other categories, such as starting to leave, eating M & M's given as a reinforcement, and answering a child's call from across the room.

The non-matches as a whole provided a rich picture of Michael's classroom life. They illustrated how proactive he was in directing some of his curriculum; they also evidenced that the teacher operated on still another level, that she had implicit plans not verbally expressed in her intent. Finally, the non-matches provided indirect measures of some of the objectives held for him in the areas of behavior, independence, and socialization. Agendas determined to be miscellaneous and ungroupable for any apparently relevant purposes were minimal.

Relationship of the Future IEP

Earlier, in Chapter VI, it was shown how very little of the phenomenological plan was reflected in the contractual plan developed for Michael's next year of school. The analysis of the empirical plan similarly re-enforced that contention, in that the skills and activities Michael was demonstrating, particularly those that emerged as non-matches, were likewise not communicated in his program for the next year. This was particularly evident in two areas: his role-playing and his pre-reading endeavors.

Michael was also demonstrating more sophisticated pre-reading interests that either the teacher or the contractual plan indicated. He was reading labels, selecting books as an independent activity, recognizing his and others' printed names, and wanting to "say" something on paper. These activities were self-generated, without intervention by an adult.

In terms of specific early reading readiness skills such as visual and auditory discrimination, beginning phonics, and simple story reading, that he may have been ready to begin, the Thesaurus included some that may have been appropriate to his level in the forthcoming year, but none were actually listed on the future IEP:

EEC93	Tell familiar story with pictures in book for cues
EEC91	Verbalize about drawing
EEC96	Tell whether or not 2 words rhyme
EEC105	Put together and tell 3-5 part sequence story
EEE92	Match symbols
EEE94	Retell main facts from story heard
EEE120	Name lower case letters of alphabet
EEE120	Sight read 10 printed words

The teacher had some objectives in mind at a similar level, but they were not transferred to the written document developed for use by his new teacher.

Michael also illustrated some initial abilities in role-playing. These could have been incorporated to strengthen both his cognitive/

language and social development. Neither the teacher nor the written document took advantage of this interest, although the Thesaurus did include a few objectives in its Socialization section that might have been appropriately listed:

EEB56	Play "dress-up" in adult clothes
EEB87	Imitate adult roles
EEB94	Act out parts of story, playing a part or using puppets

Again, however, these types of objectives were in the minority in the Socialization section of the Thesaurus, and were not even present in the Cognitive or Language sections.

Michael also wanted to learn to write his name and put it on his papers; both of these were listed as objectives on the contractual plan. He was also interested in naming letters and numbers and in counting, as the teacher's intent indicated, but none of these became a part of the future contractual plan.

In summary, while the future contractual plan contained appropriate items for Michael to achieve during his next year in kindergarten, it did not reflect much at all of Michael's self-generated curriculum interests. Michael's empirical plan and teacher intent were congruent in terms of academic skill areas, but little of this was transferred to the contractual plan. Little advantage was taken of Michael's interest and abilities in role-playing to foster skills in other areas that were deficit, namely in language and in socializing with other children.

CHAPTER VIII

SUMMARY AND IMPLICATIONS

Summary of the Study

The study of individualization has had a paradoxical history. It is one of those educational phenomena whose value has been espoused by practitioners and theorists alike, but whose test in the research arena has produced less than satisfying results. Attempts to evaluate the impact of individualization have been diffuse, but only a few studies have moved beyond the description of a particular approach to assess the qualitative effects of programs and practices upon children or the degree to which individualization was occurring. Variables of interest in most of the studies have been limited to cognitive and affective outcomes as measured by standardized tests, types of instructional conditions, teacher and student traits, quantity of instructional time, and teacher and student satisfaction.

The individual educational plan (IEP), as a particular case of individualization, has had a similar history. It was an ideology "whose time had come," valued so much by educators, parents, and policy-makers that it became a legislative mandate. Public Law 94-142 guaranteed the right of every child receiving special education services to an individually planned program, documented in an IEP. Along with a flurry of mandated implementation practices, a host of studies was engaged to evaluate the impact of IEPs. Again, these studies focused upon their effects on administration, teacher time and satisfaction, and parental satisfaction and involvement. Only one researcher has inquired as to whether teachers actually used them after they were written; there is yet to be an investigation as to whether or not children's education is any different at the classroom level once the IEP is implemented. And now, after the glow of the initial legislation has passed and in a political climate of deregulation, the IEP has lost its glamour, and its purpose as a means towards quality programming is threatened.

The purpose of this study was to investigate the process of individualization, and the IEP as a case in point, from an alternative perspective, seeking information about the relationship of plan to reality so that both educational ideology and public policy might be more adequately informed. A proposition for a triangulated study of individualization was put forth, and the study was conceptualized as the investigation of the relationships among three forms of the individual plan: the contractual plan, or the collaboratively-developed program as expressed in a written document; the phenomenological plan, or the teacher's intent for the program; and the empirical plan, or the program-as-experienced by the child. Utilizing a research design of mixed multiple strategies for data collection and analysis, a model for consideration of the individualization process emerged.

For each component of individualization, different data collection techniques were utilized. For the contractual plan, the task was simply to obtain consent to acquire a copy of the formal IEP as developed for the child-subject earlier in the year, and to question key actors about the process of its development. A copy of the data bank of instructional objectives used by the public school system was also obtained.

An ethnographic approach was taken to explicate teacher intent. A phenomenological plan emerged from a series of interviews conducted with the teacher-subject, and highlighted the goals and objectives she held for the preschool program, her class, and for the child-subject in particular. These interviews were audiotaped and transcribed. They were also supplemented by field observation in the classroom, both prior to and during the interviews.

In order to obtain information about the empirical plan, a videotape record of the child-subject's natural stream of behavior was taken. This was supplemented by observations of the classroom setting both before and during the taping, as well as by teacher retrospection, where the teacher was asked to comment upon the events depicted on the tape. Teacher retrospections were audiotaped and transcribed. A videoscript was prepared for data analysis, and consisted of the parallel placement of the verbatim videotape transcriptions, the descriptive setting notes, and the teacher retrospection transcriptions.

In summary, the data archives included:

1. a copy of the contractual plan and the data bank of objectives from which it was drawn;
2. audiotapes and transcriptions of teacher interviews;
3. videotapes and transcriptions of the child-subject's natural stream of behavior;
4. audiotapes and transcriptions of teacher retrospection; and
5. field notes of classroom observations and informal interviews and discussions.

Together these constituted a triangulated set of data about the phenomenon called individualization.

Because of the multiple forms of data, multiple strategies of data analysis were also demanded by this study. Their purpose was to synthesize the data so that relationships across the three types of plans would be manifest. A document analysis was conducted on the contractual plan to ascertain patterns of form and content. Content analysis methodology was also utilized to analyze the teacher interviews. Using a team of three analysts, a category system grounded in the identified framework of the teacher's intent was constructed. The categories were arranged to indicate the scope of the teacher's intent as well as its hierarchical arrangement. The depiction of the phenomenological plan which was developed was similar in format to the contractual one, each including numbered goals and objectives held for the child-subject, yet differing with regards to organizing framework, specific content, and detail.

Analysis of the empirical plan was a much more complex task. Here, strategies from ecological research proved most useful in unitizing and categorizing the stream of behavior. The units of agenda and circumstance were defined based on the ecological notion of episodes, and the stream was unitized accordingly by a team of two analysts. Both formative and summative measures of inter-analyst agreement were kept to assure consistency in application of the rules for unitization. These units comprised the empirical plan.

In order to categorize the empirical plan, a matching procedure was developed so that the main question of this study could be explored; i.e., to describe the relationships that existed across the three components of individualization. Each agenda in the empirical plan was matched back to an objective on either the contractual and/or the phenomenological plans; those agendas which related to neither were coded as non-matches. Again, measures of agreement were tracked, especially for unambiguous items; for the others, the analyst team functioned as an expert panel to reconcile discrepancies in coding. Agendas were also coded for day and setting. Once the matching process was complete, the search for categories and patterns among the 682 agendas was facilitated through the use of a computerized program. By adapting program routines for frequencies, cross-tabulations, and other subset analyses, patterns of interest across the data were explored. Further categorization and referral back to the transcripts and videotapes resulted in the final findings which were reported.

Highlights of the Results

The central purpose of this investigation was to ferret out discrepancies and similarities among the various components of the individualization process, and to explicate the relationships among them. There were no hypotheses tested in this study; rather, its purpose was to generate information about variables and hypotheses that might be germane to a fuller understanding of the process of individualization. Hence, the domain of this inquiry was limited to documentation, as opposed to the determination of causality or the search for solutions (see Guba, 1978). Further, while the typicality of the research setting, the subjects, and the planning process was evidenced, the reader should be cautioned about generalizability. Any generalizations made from this study should be considered working hypotheses rather than conclusions (see Cronbach, 1975).

Further, the analyses were limited to a consideration of the matches among the various components of individualization, and to some extent, the effects of context. No attempt was made to delineate findings about the IEP process in general nor to other aspects of the teaching/learning setting available in the data. These data exist, however, in the data archives, and could be retrieved and useful in the investigation of other questions beyond the scope of this study.

The results showed that there was indeed congruence across written plan, teacher intent, and the child's program-as-experienced. The teacher incorporated nearly 70% of the contractual plan into her stated plans, and the child-subject acted upon approximately 68% of teacher intents and 44% of the objectives in the contractual plan. Even the discrepancies were not contradictory; the emergent pattern illustrated how the individualized program grew in scope as one moved from written to teacher plan and through child behavior, and how the additional objectives complemented what went before. It was through the study of the discrepancies created by increasing parameters of the plans that led to some of the more interesting conclusions and implications.

While most of the objectives of the contractual plan were contained in teacher intent, the most critical finding in the comparison between the two was that they were constructed according to two different frames of reference. The objectives of the contractual plan were organized according to a curricular model, whereas the teacher reconfigured those objectives to reflect her personal values and professional perspectives. In the teacher's mind, specific objectives for Michael were nested in three overarching goals: that he be able to function independently, that he succeed in a non-special education kindergarten classroom, and that he become a sensitive member of a social group. The contractual plan, on the other hand, emphasized the development of cognitive/language, self-help, and motor skills. The teacher cast the multitude of objectives, not only Michael's but also those of the other children, into a framework more congruent with what she was about as a person and as a professional practitioner. She related to Michael as an individual, yet she cast his objectives into a context that served not only him, but both the other children and what she valued as well. The classroom curriculum became the teacher's perspective, a finding that substantiates the work of Janesick (1978).

Other findings of interest that emerged as a result of comparing teacher intent to the contractual plan included:

- Objectives found in both the written plan and teacher intent often served as means to differing ends; the teacher may have been working on similar skills, but her purpose for learning those skills differed from the contractual plan. Examples of this occurred especially with language and play objectives: for instance, she related Michael's achievement of language skills to social language development, and of play skills to the development of independence. In the contractual plan, language skills were related to correct usage, and play skills were included for the purpose of socialization.

- The teacher coped with remembering and handling large numbers of objectives by integrating them into her schema of desired classroom program goals, which were then achievable during total class activities; for example, Michael's language and self-concept needs could be met in the context of regular activities through his interactions with other children --- specific "lessons" were then not as necessary nor was individual instruction.

- Another way the teacher achieved parsimony was to utilize present classroom settings and everyday occurrences to achieve objectives for many of the children, again eliminating the need for specially-planned group or individual lessons; for example, needed self-help skills could be practiced in the cafeteria or getting off the bus.

These findings corroborate the review by Clark and Yinger (1980) that documented the fact that teachers deal with the complexity of the teaching situation by simplifying it in some rational and adaptive way. Here, the teacher's implementation style and management strategies affected how large numbers of objectives were consolidated into a manageable plan. Additionally, this study provided information to support how teachers recast objectives to suit their own purposes, and as to how they identify and monitor aspects of the teaching/learning situation that were most relevant to them, findings also reported by Morine (in Yinger, 1978) and Morine-Dershimer (in Brophy, 1980).

The analysis of the empirical plan was guided by three questions:

- What objectives on the contractual plan were being met?

- What objectives of the phenomenological plan were being met?

* What else were Michael and/or the teacher doing?

Slightly over half of Michael's activities related to objectives found in teacher intent and/or the written plan. Over 50% of the objectives in the contractual plan were matched to Michael's observed behavior, and over 67% to objectives indicated in teacher intent. Thus, a good portion of what was intended for Michael was being achieved. But most importantly, the other half of Michael's behavior extended beyond what had been planned. Overall, this presented a bimodal view of what was occurring in the classroom: teacher plans were getting accomplished, but Michael also was a proactive force in determining the direction and content of his program.

The teacher-subject was quite adept at assuring that her intent was carried out in practice. First of all, the objectives from the contractual plan which were congruent to teacher intent were those most likely to be implemented. Furthermore, the greatest proportion of teacher intent which was implemented was that which contained her own objectives, those which extended beyond the contractual plan. Thus, it appeared that while the teacher worked to accomplish the contractual objectives, primarily preacademic and language in nature, she also moved to accomplish those objectives which were more important to her frame of reference: namely, social development, independence, and learning to do what was expected in school. This was consistent with the goals which she valued most highly for her program, and with findings by Morine (in Yinger, 1978).

Other indications of teacher influence upon the program-as-experienced were found in the analyses of objective-matches by settings. The predominant objectives which matched Michael's agendas across the various behavior settings were consistent with the teacher's expectations of what was to occur in those settings. In other words, a standing pattern of behavior had been established which shaped Michael's behavior. This was accomplished not only by the teacher's overt actions and verbalizations in establishing and maintaining the pattern, but also through the use of space, the selection and placement of behavior objects, and the structure of time, so that behavior and milieu were synomorphic, in ecological terms. Thus, what was found, not surprisingly, was that socialization and independence skills were a predominant match during Free Play; that feeding and language agendas occurred during Snack; and that preacademic skills were in the majority of agendas during Circle and Small Group. The strength of the behavior settings, however, is related not only to teacher intent, but also to Michael's self-initiated behavior. Even in those situations, in the absence of teacher direction, Michael's behaviors were consonant with the standing patterns of behavior for the various settings. As a result, and to further substantiate this postulate of ecological theory, there were relatively few instances where Michael was reprimanded for inappropriate behaviors. He was reading the "programs" of the settings.

Another interesting set of findings concerned Michael's proactive nature. Just as the teacher was able to carry out her intent, so did Michael carry out a set of agendas that went beyond what was planned for him in either his contractual or phenomenological plans. Over 50% of his behavior was categorized as non-matches. Despite a setting heavily influenced by adult intent, quite structured and with limited opportunities for choice, Michael was able to direct a fairly significant amount of his program. Several instances evidenced this: 1) Michael's self-initiation of behaviors which were coded as "seeking out friendships" and "exploring the environment;" 2) the area of pretending, not mentioned in any of the plans and supported only at the level of finger plays and songs by the teacher, but more substantively initiated and sustained by Michael without much teacher intervention; 3) the area of skill extensions, particularly where Michael independently demonstrated his interest in and readiness for early reading experiences; and 4) Michael's initiation of non-match agendas during the most structured settings, which also were settings during which the teacher carried out most of her intent. Thus, this case study supported the hypothesis that the curriculum is as much the child's perspective as it is the teacher's, a finding that extends Janesick (1978).

Other findings of note which resulted from the comparison of the emperical plan back to the other two plans included:

* Transitions were important settings for learning, particularly, in this case, for objectives in the areas of socialization, independence, and other school readiness behaviors. Behaviors here were both teacher-directed and self-initiated.

* Even though the teacher articulated explicit plans for purposes of this study, there were instances where the record illuminated her implicit plans as well. Some were simply extensions of content or level not indicated in the phenomenological plan; others were even contradictory to what she said she intended, as in the instance of her asking higher level

questions than she believed appropriate for Michael's stage of development, and which nonetheless were answered correctly by Michael.

* The non-match analysis served another purpose, that of illuminating Michael's classroom style. For instance, it provided an indication of his interest in classroom events and learning activities, of his goal-directedness, his alertness, and his playful teasing nature. They also showed he did not unduly seek attention or affection, nor did he engage in a large number of random or inappropriate behaviors. These would be useful as indirect measures of some of the objectives held for him in the areas of behavior, independence, and school readiness.

* A large proportion of Michael's agendas were coded as Watching/Listening. Even though Michael was physically passive, it was evidenced how a great deal of learning took place in these situations. Michael gained knowledge about classroom behavioral expectations, confirmed or re-enforced academic learnings by watching and listening to other children respond in teaching/learning interactions, and saw examples of others modeling sensitive behaviors towards the children with differences. By watching other children, he also gathered ideas he could use for himself, such as building a C.B. radio from blocks or tying a scarf around his head to be an Indian.

Additionally, the analysis of the phenomenological plan provided evidence to assess researcher effects on the naturally-occurring behaviors of the setting in several ways. First, during teacher retrospection activities, the teacher was able to indicate whether the child-subject or any other children were acting differently as a result of the presence of the equipment or the researcher; she indicated that Michael's behavior on the videotape was typical and that only one other child during one segment was "showing off." Second, although the assessment of degree of teacher desensitization was more indirect, the data did expose some cause to suspect potential researcher effects there. The large number of agendas of Day 1 which matched to the phenomenological plan, coupled with the small number of agendas coded as non-matches, could be interpreted that the teacher was more in control on the first data collection day. This may have been an indication of her attempt to demonstrate best teaching practices and that she was meeting the intent of the written plan, the hypothesis being that while she may have been desensitized to the presence of the researcher in the classroom, but not to the research question, at least until after the first day.

Finally, an analysis of the agendas showed a low frequency of those that had anything to do with the researcher, the television equipment, the smock, or the loose transistor wire. In fact, there were only 21 agendas entitled with any of these conditions, comprising 3% of the 682 total agendas. Most occurred on the first day of data collection. They were distributed as follows:

Wire	1 agenda
Researcher	0 agendas
Smock	13 agendas
Television	7 agendas

As expected, most of these agendas had to do with the smock, which was an indication that it was not entirely comfortable. Being compliant, Michael wore it in the morning, but discarded it after Small Group, and did not wish to put it back on after Gross Motor Time for Large Group. The agendas related to the television equipment were more positive in nature, and were construed as learning activities: for instance, putting the mice on the turn-table, looking at the television screen to see what he looked like in a mask, making faces with a friend to see themselves on the screen, and the like. Except for the pre-data collection interchanges with the researcher in the mornings, there were no agendas where Michael related to the researcher during data collection sessions.

Implications for Practice and Further Research

The purpose of this study was to explore various aspects of the individualization in order to generate information about variables, contextual factors, and potential hypotheses that might be germane to practice and future research in this area. The IEP provided an occasion to posit an alternative conceptualization about the process of individual planning and implementation, and to study individualization from a view that was more comprehensive than previous research, one which involved key components of the planning/teaching/learning process.

Originally, Public Law 94-142 was an implementation technique to provide direction to policies set earlier in the courts. The IEP was included as an alternative accountability system and as a way to document individualization. Early research and practice in the area have concentrated on administrative and practical processes and outcomes. Yet it may be as important, if not more so, to advance the study of individualization from its conceptual base.

The current political climate of the 1980s seeks to deregulate much federal legislation, and a regressive economy is forcing reconsideration of federal support of education. One of the most severe tests of an innovation is its capacity to withstand withdrawal of resources and still maintain its conceptual integrity. The IEP provisions of Public Law 94-142 are key items under consideration for revision. The pragmatic response has been to make it simpler, to eliminate many of the regulated components and procedures, and to make it administratively more efficient. On the other hand, a more appropriate response might be the conceptual one --- to search for ways to make it more *effective*, so that it fosters individualization, its original purpose.

Up until now, most practitioners and researchers have considered the IEP to be merely a written document. This study has shown the reality of a different conceptualization, that of a *comprehensive individualized program* which acknowledges the interaction of written plan, teacher intent, and child behavior. If the IEP document continues to stand in isolation from teacher and child, it will continue to be perceived as "paperwork" and "time-consuming." As such, it cannot become a vehicle for mediating and integrating the day-to-day experience of teacher and child in the planning/teaching/learning process. How to get that input without violating due process or increasing paperwork remains a critical question. This study poses a counter proposal to the administrative solution: that the legitimization of the subjective perceptions of teachers, children, and parents can provide viable bases for evaluating and revising IEP policies and procedures.

Questions for policy evaluation certainly include the relationship of teacher values and professional perspectives to the planning and implementation process. In this case, the teacher's frame of reference differed from that of the contractual plan, and she clearly had different ends in mind for dealing with the same objectives, but this discrepancy was a complementary one. The teacher implemented a great proportion of the contractual objectives in addition to those of her own. What may be a critical finding is that the child primarily acted upon those which were congruent to *both* and to others contained *only* in teacher intent. The influence of the teacher in how a policy becomes implemented is powerful.

This may have greater implications when the discrepancy between teacher frame of reference and formal document is greater. Nearly all the objectives in the contractual plan were devoted to academic and self-help skills, and those complemented one of the teacher's primary purposes, that of preparing Michael for an academic setting. Her classroom was structured for such learning; its activities paralleled what might be expected in a first grade, and the contractual plan was nested within her intent. Had the phenomenological plan reflected the values of a different school of early childhood educators, one which stresses the role of play and social development for instance, would the discrepancy between the two plans have been as complementary? The issue of utilization or lack of it may in part be due to lack of congruency between teacher values and schemes for organizing IEPs.

Further, the preponderance of academic emphases in plan development may result in irresolvable discrepancies between the values of the document and those of the teacher, and hence, lack of utilization of the plan and the tendency to revert to teacher assessments of what is important rather than the contractual agreement.

School policy often interprets the function of the IEP to be one of providing a framework for the instructional program rather than defining the entire program. It is problematic, however, that this occurred in this case. It appeared that teacher intent guided the framework of the instructional program to a far greater degree. These observations bear further investigation before the question of utilization is laid to rest. The wealth of information resting in the teacher's head and her powerful role in implementation of policy provide justification for a more active and central role for the classroom teacher in the plan development process, a situation not reflected in current practice (Pugach, 1982).

Related to this issue are questions of scope and specificity, and the perennial dilemma of attempting to operationalize the differentiation between goals and objectives. Clearly, the contractual plan carried a multitude of specific, measurable objectives. Yet the teacher's intents, stated less "according-to-Hoyle" (or to Mager (1962), as the case may be) seemed workable in so far as providing her with a relevant framework of operating in the classroom. Most importantly, they could be evidenced in the descriptive record of Michael's activities; e.g., his listening and watching agendas, his low rate of random or inappropriate behaviors. These types of objectives made sense to the teacher and their achievement could be evidenced, without the degree of specification and a priori measures usually recommended for statements of behavioral objectives. Consideration of the use of relevance and evidence in defining criteria for the statement and measurement of objectives may make their use more palatable to teachers.

Additionally, the desired scope of contractual plans may need reconsideration, on the basis of some findings in this study. There may be a point at which the number of objectives for a teacher to process and mediate becomes moot. Also, there is conjecture that while the plan may be developed on an individual basis, individuality is lost in practice as the teacher strives to cope and integrate varying objectives for varying students. The teacher's process may be one of management --- building cohesiveness into an array of demands on her professional behavior by simplification and re-ordering. Thus, the focus on activities, found so often in other studies of teacher planning (Yinger, 1978; and also Clark & Yinger, 1979; Peterson, Marx, & Clark, 1978; Taylor, 1970; and Zahorik, 1975), may simply have been a reflection of the teacher's attempts to simplify and control a demanding environment. Therefore, an activity like Circle could foster for all the children the development of a sense of groupness, while simultaneously facilitating attainment of one child's language skills, another child's understanding of the terms "over" and "under," and still another's ability to attend to a group leader. Along with re-evaluation of degree of specificity may come consideration of optimal numbers of objectives to include on the formal IEP, perhaps leaving more detail to weekly and daily instructional plans.

The legitimization of subjective perceptions also challenges current innovative practices to make individual planning more efficient, namely the use of objective banks. In the interests of management and administration, many schools have turned to the use of databases of objectives, either in print or in computerized form, for use in development of plans. Marver and David (1978) and Safer et al (1978) concluded that data banks and data management systems were key factors conducive to the utilization of IEPs. While at first glance these objective banks may appear to ease clerical demands, there is the possibility that they may also be hindering the implementation process by de-professionalizing the role of the teacher. The spewing out of objectives devoid of any relation to the professional values and knowledge of the teacher may have resulted in written plans that sit in files, while teachers make use of cues from within themselves as well as from their day-to-day interactions with children to plan and implement individual programs.

In an effort to ease the demands of compliance, educators may have inadvertantly fostered a system that results in lists of preordained objectives that have little perceived utility in the classroom. Further, they may have hindered the dynamic process of IEP development and the inclusion of differential knowledge from teacher, child, and parent. While, it is argued, there is always possibility to include self-developed or group-developed objectives into the bank, the power of the resource may be so coercive that it is easier to resort to it than to make use of the alternative. A parallel example can be found in the use of curriculum guides --- "good" teachers know they are only a resource and a "guide," but once present, they can easily become the point of least resistance. Planning based on professional knowledge and experience is subordinated to the ease of selecting already thought out solutions. Support for this hypothesis can be found in the future IEP, developed by the teacher who by then "knew both the child and the system." There was almost as little reflection of teacher knowledge in the future plan as when the first IEP was developed by the teacher-subject who at that time "knew the system, but not the child." The future IEP reflected neither the knowledge the teacher had about the child, nor the input of the child regarding his curricular interests

The role of the teacher in the individualization process must be taken into account. In the implementation of IEP policy at the classroom level, the teacher is clearly the "street level bureaucrat" who Weatherley and Lipsky (1977) contended molds and shapes the intended policy to its ultimate outcomes in practice, due to their considerable latitude in decision-making. The findings of this study illustrated how teachers' values did indeed influence priorities and how teaching decisions were based more upon what a teacher thought ought to be and what she came to know of the child rather than on numerous objectives listed with little relation to a teacher's frame of reference. Recognition of teacher perspectives and perceptions in the planning process may make the IEP policy more relevant and hence, more useful in directing instruction.

Yet the study illustrated the teacher is not the only key actor. A conception of individualization as plan plus teacher plus child was posited and shown to exist. Each form of individualization differed, but complemented the other; while the contractual plan may have begun as the baseline, it was transformed by the teacher, and additionally influenced by the child. The increasing scope of the different forms of plans and their interactive natures combined to describe a picture of individualization that could influence both practice and research.

The child is proactive, and this not only provides the teacher immediate feedback, but also poses a sensible solution to meeting the spirit of the law in its provision that the child attend planning meetings, when appropriate. Commonly excluded due to age, young children could "participate" in the development of their program, not by physical attendance, but by input gleaned from systematic observations of their behaviors in relation to already-stated goals, as well as those self-initiated agendas that indicate new directions which attract the child.

This knowledge of the child's proactivity may also stimulate more valid use of data banks: to use them to describe current behavior for the purposes of illuminating next steps, as opposed to using them *a priori* to proscribe behavior. Furthermore, to use data banks in a prescriptive sense may be antithetical to individualization, which is a response to a child's unique behaviors. Objective banks are a composite of the *past* behavior of *other* children --- while many of the objectives listed there may be appropriate to a child's current need, there also exists the danger of attempting to fit the child to the objectives at hand. The focus of accountability systems should be one of evaluating the congruence of plans to identified needs, rather than behavior to prespecified plans. In that way, the focus of evaluation is on the degree to which the setting meets the needs of the child rather than whether the child has conformed to external standards.

The fact that there were more agendas identified than matched objectives may also mitigate against prescription. One interpretation about their existence may be that they were functionally determined in the process of Michael, the teacher, and/or other children "getting together." The teacher may have established some potential occasions for the emergence of learnings by her arrangements of time, activities, and materials, but she did not control the achievement of particular objectives beyond that. Yet they occurred. Perhaps this argues for more consideration of the role of the teacher in individualized programs to facilitate function and role manipulation rather than to predict behavior and outcomes.

The final implication for practice emanates from the discovery of still another type of plan. Despite a wealth of interview data and corroboration of teacher intent on the meaning of the stated objectives, the analysis of the stream of behavior brought to light instances where Michael's agendas went beyond stated teacher intent, and included an intervention by the teacher to elicit that behavior. As a result, the phenomenological component of individualization may need to be expanded to include explicit statements of intent as well as implicit objectives.

Teacher retrospection can also play a role in bringing the implicit and explicit plans together in teacher consciousness. Retrospection may be a mechanism to provide the necessary feedback which could allow teachers to confront discrepancies between plan and action, and to respond to programmatic directions indicated by the child. Brophy (1980) reviewed several studies which showed how teachers had more "reality contact" when lessons went awry or when forced to deal with minor deviations from their plans; at other times, they worked on "automatic pilot" and were less responsive to students. Data from retrospection may serve a similar purpose in the assessment of teacher effectiveness. A fruitful line of research may be to further examine the relationships of teacher plan and classroom reality, and the changes in the degree of discrepancy wrought by utilization of retrospection. Further, retrospection as a tool for self-evaluation utilizing anecdotal records, observations, and/or professional peers, for the purpose of confronting and reconciling such discrepancies, could be incorporated in professional preparation programs and professional development inservice.

Methodological Implications

Naturalistic investigations are demanding ones, as the preceding 235 pages can attest to. While the purpose of this study was primarily a substantive one, its very nature, particularly in the attempts to match question to design, data collection, and analysis, led to the confrontation of several methodological concerns. As a result, there emerged some implications that might be shared with other naturalistic inquirers.

First is the concern for multiple realities. Usually, naturalists seek to triangulate in order to take into account their recognition of the presence of varied perspectives of "truth." This study stands as another example of the contention that triangulation is the essence of naturalistic inquiry. There may be two effects of triangulation. One may be convergence towards a reconciled "truth," the development of a model which synthesizes all perspectives. In this study, the viability of assuming and explicating divergence is presented as an example of another effect. The differences in these two outcomes and when either is an appropriate model is fruit for further consideration.

To triangulate is to seek information from various actors in the system and about various components of the system in as many different modes of investigation as possible (e.g., document review, observation, interviews). Together, these result in a "thick description" of a phenomenon. In striving towards that goal in this study, another implication became clear --- that of the effects of the medium upon understanding that phenomenon.

McLuhan and Fiore's (1967) insights that media alter the way we see the world have some import to this discussion. If, as they contend, an event is shaped more by the nature of the medium by which it is communicated than by its content, then the impact of the selection of particular media for data collection upon results may be a rich area for investigation. In this study, a fairly wide range of media was utilized, from the human instrument to electronic technology. Eyes recorded events and perused print; ears perceived sounds and communicative utterances. Television and audio tapes captured elements of the same events. These may have predisposed the analysts to think and act in different ways; they may have depicted events and settings in such a way as to evoke unique ratios of sense perceptions.

Some of the trade-offs were known. For instance, videotape was selected because of its low selective attention and its ability, through sight and sound, to capture perhaps the most detailed "slice of life;" selection of other media may have reduced the data or have introduced more observer bias. However, had the human instrument been selected as the primary medium of data collection, it may have added to the record an organizing scheme of value, a "sense" of the setting, or a more comprehensive view than the restrictions the camera's lens angle allowed. Degree of detail, degree of objectivity, and degree of synthesis may affect what picture of an area of inquiry emerges.

Also in this study, a preliminary attempt was made to use an internal medium, that of teacher retrospection. While intended primarily as a tool for corroboration, it provided a different state through which data flowed, and further addressed issues central to behavioral psychologists (Lieberman, 1979; Radford, 1974) and sociologists (Reinharz, 1979) regarding the validity of introspective data. The investigation of the differential effects of media in yielding data otherwise inaccessible, in bringing to light new facts, and in stimulating the asking of new questions is an intriguing, though perhaps elusive methodological concern.

A third implication for research concerns the issue of representativeness. Examples of techniques to provide thicker descriptions of the case so as to better assess "fit" to other situations were given in this study. The utility of Bronfenbrenner's conception of various levels of systems and Barker's techniques of behavior setting analysis proved to be usable as tools for assessing and describing the typicality of a chosen research site. However, only the surface was scratched in this study, and there remains much more possibility for the development of tools such as these as alternatives to procedures used more appropriately in experimental designs and as ways to avoid the critique of being "soft."

A fourth implication concerns the concept of behavior settings and their standing patterns of behavior. Consonant with Barker (1968), McLuhan and Fiore (1967) also recognized that "environments are not passive wrappings, but active processes which are invisible . . . ground rules, pervasive structures, and overall patterns elude easy perceptions" (p. 68). In this study, settings were identified and their power to coerce behavior was affirmed. Many of Michael's agendas which were independent of teacher behavior were illustrative of the standing pattern of behavior at work: at Circle Time, Michael went to the carpeted area of the room, sat in the prearranged chairs, and waited for the other children to arrive; at Snack, he conversed spontaneously, while at the same table for Small Group, he raised his hand to respond to teacher-directed questions. His behavior was synomorphic with the settings of the preschool, and he was a child who "read" their programs well.

Furthermore, the function of space, objects and other people to affirm or re-direct the behavior within a setting was evidenced; for instance, the teacher calls from the Snack Table, "It's time for Snack!" to bring children to the table; or a child says, "Hey, Michael!" and engages Michael in a play activity; or books placed on a table attract Michael to leaf through them. An additional analysis of the agendas in this database could result in the identification of patterns regarding the relationship of people, objects, and space to the maintainence of the integrity of a setting. The place of setting "plans" in the model of individualization exists as a potential next research step.

Likewise, the concept of unit of analysis bears further investigation. Two kinds of units have been used in ecological research, but not usually together: the episode, which indicates psychological intent of the subject (Barker & Wright, 1971), and the environmental force unit (EFU), which indicates external forces brought to bear on the subject (Schoggen, 1963). In this study, the concept of ecological unit was reconstrued in an attempt to integrate the two, through the simultaneous use of agenda and circumstance, in order to come closer to the conceptual base of ecological research. Continued investigation of the relationship of agendas to circumstances might enable the researcher to address certain questions more easily: such as, what forces interrupted Michael's agendas? to what degree were Michael's agendas congruent with, complementary to, or counter to the circumstances of the event? what kinds of forces (adults, children, events, things) impinged upon Michael's behavior, and were there differential results? when a child is reprimanded or deemed deviant, what cues in the setting were ignored and/or what in the agenda seemed to override the expected pattern of behavior? By consideration of the typical units of ecological records in tandem, the linkage between behavior and setting might be further understood.

The uses of a naturalistic paradigm and an arsenal of multiple strategies and media have been helpful to illumine some of the intrinsic properties of a system of individualization and classroom teaching/learning settings. Despite the extent of this presentation of methods and results, only the surface has been scratched. That it may have provided inspiration or insights for further substantive and methodological questions could be its major contribution.

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APPENDIX A

Subject Appropriateness Scale

Subject Appropriateness Scale

Name:______________________________ Date:______________

A. Rank the children in terms of how able they are to move about unassisted.

MOST MOBILE: 1
2
3
4
5
6
7
8
9
LEAST MOBILE: 10

B. Rank the children according to how well they can make themselves understood.

MOST CLEARLY VERBAL: 1
2
3
4
5
6
7
8
9
LEAST CLEARLY VERBAL: 10

C. Rank the children according to how well you think others can tell if they have comprehended something.

MOST UNDERSTOOD: 1
2
3
4
5
6
7
8
9
LEAST UNDERSTOOD: 10

D. Rank the children according to how well you think they would be able to "desensitize" to a earing a microphone or seeing a videotape camera in the room.

MOST ABLE TO DESENSITIZE: 1
2
3
4
5
6
7
8
9
LEAST ABLES TO DESENSITIZE: 10

E. Rank the children according to how often they are present in the classroom.

MOST OFTEN PRESENT: 1
2
3
4
5
6
7
8
9
LEAST OFTEN PRESENT: 10

F. Rank the children according to their attendance record.

MOST OFTEN ABSENT: 1
2
3
4
5
6
7
8
9
LEAST OFTEN ABSENT: 10

G. Which children are not present.

Monday AM:
Tuesday AM:
Wednesday AM:
Thursday AM:
Friday AM:

APPENDIX B

Criteria for External Review of IEPs

EXTERNAL REVIEW OF IEPs

Child's name: ____

Date of last IEP meeting: ______________ Next IEP meeting? ______________

Who was present: ______________________ ______________________

______________________ ______________________

______________________ ______________________

Who wrote the IEP? ____

DOES THE IEP CONTAIN:

1. A listing of annual goals? ___Yes ___No If so, how many? _______

   a. What areas do the goals address? (Check those that apply.)

      _____Gross motor development How many? _____

      _____Fine motor development How many? _____

      _____Language development How many? _____

      _____Preacademics How many? _____

      _____Social Development How many? _____

      _____Self-help skills How many? _____

      _____Physical development How many? _____

      _____Emotional development How many? _____

   b. Are other areas listed? (Please indicate below:)

   c. Are the goals prioritized? ______Yes ______No

2. A listing of short term objectives? _____Yes _____No If so, how many? ______.

   a. What areas do the objectives address? (Check those that apply.)

      _____Gross motor development How many? _____
      _____Fine motor development How many? _____
      _____Language development How many? _____
      _____Preacademics How many? _____
      _____Social development How many? _____
      _____Self-help skills How many? _____
      _____Physical development How many? _____
      _____Emotional development How many? _____

   b. Are other areas listed? (Please indicate below.)

3. Do the objectives/goals have recommended instructional materials and/or strategies indicated? _____Yes _____No

   If so, give an example:

4. Do the objectives/goals include a statement of expected behavior to an acceptable standard (criteria for review)? _____Yes _____No

   If so, give an example:

5. Do the objectives/goals have target completion dates indicated? _____Yes _____No

   If so, give an example:

Reviewer's name:_________________________________ Date:______________

APPENDIX C

Letters of Consent

a. Child-subject form

b. General class form

Letter of Consent for Child-Subject

INDIANA UNIVERSITY

DEVELOPMENTAL TRAINING CENTER
2853 East Tenth Street
Bloomington, Indiana 47405
(812) 337-6508

Dear Parents:

Over the next few weeks, I will be observing your child's classroom as part of my dissertation study. I am writing to ask for your consent for your child to be a part of that research.

The children will simply go about their normal activities as I observe. For three mornings (April 22, 29, and May 6), I will videotape the lessons and activities. During that time, some of the children will be asked to wear smocks, which will conceal a microphone so that their voices can also be recorded. The smocks will also be used by the teachers as part of their group lessons, as well. We will spend time during the week of April 14th to get the children used to the smocks and the camera.

The names of the children will be kept confidential--code names will always be used. In addition, the videotapes will only be used for research and scholarly purposes; they will not be published nor appear for the general public in any way.

In addition, I would like your permission to look at your child's IEP, so that I might gain more information about the program that was planned last year.

If you would like your child to participate in this study, please fill out and detach the form below and return it to your child's teacher at your earliest convenience. If you choose not to participate, in no way will the education or care of your child be affected. If you have any questions, please don't hesitate to contact her about them.

Sincerely,

Vicki Pappas
Research Associate

I give consent for my child, ____________________, to participate in the research study described above. I understand that this will involve:

1. My child being videotaped during normal classroom activities.
2. The possibility of my child wearing a smock along with several other children so that their voices can be recorded.
3. Permission for the researcher to look at my child's IEP.

I further understand that all information about my child will be kept confidential and that the videotapes will be used only for research and scholarly purposes. Finally, I understand that I may ask questions and receive information about my child's participation in the research. If at any time I wish to terminate my consent, this will be honored.

______________________________ (Signature of parent or guardian)

______________________________ (Date)

Letter of Consent for Other Students

INDIANA UNIVERSITY
DEVELOPMENTAL TRAINING CENTER
2853 East Tenth Street
Bloomington, Indiana 47405
(812) 337-6508

Dear Parents:

Over the next few weeks, I will be observing your child's classroom as part of my dissertation study. I am writing to ask for your consent for your child to be a part of that research.

The children will simply go about their normal activities as I observe. For three mornings (April 22, 29, and May 6), I will videotape the lessons and activities. During that time, some of the children will be asked to wear smocks, which will conceal a microphone so that their voices can also be recorded. The smocks will also be used by the teachers as part of their group lessons, as well. We will spend time during the week of April 14th to get the children used to the smocks and the camera.

The names of the children will be kept confidential--code names will always be used. In addition, the videotapes will only be used for research and scholarly purposes; they will not be published nor appear for the general public in any way.

If you would like your child to participate in this study, please fill out and detach the form below and return it to your child's teacher at your earliest convenience. If you choose not to participate, in no way will the education or care of your child be affected. If you have any questions, please don't hesitate to contact her about them.

Sincerely,

Vicki Pappas
Research Associate

I give consent for my child, ____________________, to participate in the research study described above. I understand that this will involve:

1. My child being videotaped during normal classroom activities.
2. The possibility of my child wearing a smock along with several other children so that their voices can be recorded.

I further understand that all information about my child will be kept confidential and that the videotapes will be used only for research and scholarly purposes. Finally, I understand that I may ask questions and receive information about my child's participation in the research. If at any time I wish to terminate my consent, this will be honored.

______________________________ (Signature of parent or guardian)

______________________________ (Date)

APPENDIX D

Initial IEP Developed for the Child-Subject

IDENTIFICATION INFORMATION:

Name: MICHAEL
Birthdate: 3/27/75
Parent Name:
Phone:
Address:

IEP Beginning Date: 10/11/79 IEP Exit Date: 6/6/80
School of Enrolment on Beginning Date: University Elementary Preschool
Program and Level: CH/Pre-S

Date of Meeting: 10/11/79

Persons Who Will Implement IEP:

Teacher
Speech/Language Pathologist

Case Conference Commitee:

Coordinator of Elementary Special Education
Coordinator of Preschool
Head Start Teacher
Teacher
Psychologist
Parent
Head Start
Social Worker

Educational Services to be Provided:

1) **Specialized Programs and Services:**
Communication Handicapped , P.T.

2) **Participation in Regular Classes and Programs:**
~~Full time~~ Music; 20 min. per week

Evaluation and Review:

1) Appropriate criterion tests will be administered for short term objectives throughout the school year. Records will be kept of the criterion tests and the date of initiation and completion of each objective.

2) Diagnostic tests in Reading and Math will be administered each spring to determine present performance level as well as serve as a basis for evaluation.

Michael

PRE-READINESS

PRESENT PERFORMANCE LEVEL

PRB 30	Play with one other child, each doing seperate activity
PRB 47	Say "please" and "thank you" when reminded
PRB 48	Attempt to help parent with tasks by doing a part of the chore (holding dust pan)
PRC 23	Name 4 toys
PRC 16	point to 12 familiar objects when named
PRC 27	Name 3 body parts on a doll or other person
PRC 43	Carry out a series of two related commands
PRD 85	Go to the bathroom in time, undresses, wipes self, flushes toilet and dresses unaided
PRD 83	Help set table by correctly placing plates, napkins, and utensils with verbal cues
PRD 87	Hang up clothes on hanger
PRE 30	Copy a circle
PRE 39	Match geometric form with picture of shape

OBJECTIVES

PRB 31	Take part in game, pushing car or rolling ball with another child 2-5 minutes
PRB 33	Actively explore environment
PRB 34	Takes part in manipulative game (pulls string, turns handle) with another person
PRB 41	Play with 2 or 3 peers
PRB 46	Attend to music or stories 5-10 minutes
PRC 36	Answers "where" questions
PRC 40	Point to pictures of common object described by its use (10)
PRC 61	Carries out series of two unrelated commands
PRC 66	Tells how common objects are used
PRC 67	Expresses future occurrences with "going to," "have to," "want to"
PRC 70	Tells two events in order of occurence
PRE 28	Draw a vertical line in imitation
PRE 29	Draw a horizontal line in imitation

BEHAVIOR

PRESENT PERFORMANCE LEVEL

BEA 37	Work quietly without disturbing others
BEB 42	Respond positively to overtures of friendship
BEC 18	Use acceptable table manners
BEC 15	Dress self independently
BEC 52	Use simple courtesies such as: "Excuse me", "thank you", and "please".

Michael

OBJECTIVES

BEA 44	Increase attention span at any one task for up to two minutes
3EB 39	Seek out friendships with others
BEC 21	Practice self-control regularly

HANDWRITING

PRESENT PERFORMANCE LEVEL

HAA 18	Form a circle
HAA 12	Draw a line from top to bottom
HAA 14	Draw a line from left to right

OBJECTIVES

HAA 20	Form a triangle
HAA 21	Form a square
HAA 22	Form a rectangle
HAA 67	Print with proper pressure on writing instrument

HEALTH

PRESENT PERFORMANCE LEVEL

HEA 05	Demonstrate correct hand washing
HEA 25	Keep hands (fingernails, body, hair) clean
HEA 40	Demonstrate the use of a comb and brush
HEA 74	Demonstrate the use of toothbrush and toothpaste

OBJECTIVES

Finish completely his meals

SPEECH, HEARING, AND LANGUAGE

PRESENT PERFORMANCE LEVEL

SPLAI 78	Ask /why/ questions
SPF 105	Produce three word phrases fluent speech in structured speech
SPF 125	Produce single words in fluent speech in spontaneous speech

OBJECTIVES

SPLAI 83	Answer /what/ questions in a grammatically correct sentence
SPLAI 83	Answer /where/ questions in a grammatically correct sentence
SPLAI 85	Answer /why/ questions in a grammatically correct sentence
SPLAI 88	Answer /how/ questions in a grammatically correct sentence
SP3A 50	State opposite analogies (fire is hot - ice is cold)
SPSA 55	Group pictures into categories
SPSA 70	Identify colors
SPSD 05	Demonstrate understanding (through stating, acting, and pointing)of the difference between same and different

READING

PRESENT PERFORMANCE LEVEL:

RED 04 Select a Matching picture from a field of three

OBJECTIVES:

RED 12 Identify basic colors
RED 13 State basic colors

APPENDIX E

IEP Developed for the Child-Subject in December

Michael's Revised IEP Objectives (December)

FINE MOTOR SKILLS:

1) Will put paper clip on paper
2) Will crease paper with fingers
3) Will complete puzzle of 11-15 pieces
4) Will trace letters of name
5) Will draw a person
6) Will paint, and make with clay, recognizable objects

SELF-HELP SKILLS:

1) Will dress unsupervised except for help with difficult fastenings
2) Will unzip separating front zipper
3) Will turn socks right side out
4) Will completely care for toileting needs

SPEECH AND LANGUAGE SKILLS:

1) Will ask questions about persons and things
2) Will relate experiences with some understanding of sequence and closure
3) Will give town and street address
4) Will repeat a sequence of 4 numbers

GENERAL KNOWLEDGE AND COMPREHENSION

1) Will name body parts of heel, fingernails, elbows, and ankle
2) Will name colors of orange, purple, brown, black, pink, grey, and white
3) Will name rectangle and diamond
4) Will know concepts of yesterday, tomorrow and tomorrow night
5) Will sort (small, medium, large) by size
6) Will understand "stop" and "go"
7) Will try to read books from memory

INDIANA HOME TEACHING

GROSS-MOTOR SKILLS:

1) Will hop
2) Will skip or gallop
3) Will catch a large ball

FINE MOTOR SKILLS:

1) Will verbalize about what he has drawn or scribbled
2) Will tell the name of, or facts about a familiar story
3) Will use elaborate or extended sentences

PRE-ACADEMIC

A) Classification/Seriation

1) Will discriminate between more and less

2) Will group objects by function or use
3) Will group by size
4) Will discriminate orders by size (biggest, next biggest, smallest)

B) Representation:

1) Will draw simple shapes without a model
2) Will indicate first letter of own name
3) Will print own name from model

C) Number:

1) Will count and point to 6 objects in imitation
2) Will match 2 sets of objects
3) Will tell which has "more" "less"
4) Will count 5 objects aloud, no assistance

D) Temporal Relations:

1) Will identify routine events
2) Will recall recent past
3) Will recall major events in the distant past
4) Will learn "long time" and "short time"

PERSONAL AUTONOMY:

A) Feeding:

1) Will use knife to cut (with fork)
2) Will use all eating utensils (spoon, knife, fork, and glass)
3) Will clear place at table
4) Will help set own place at table

B) Dressing:

1) Will unzip clothing
2) Will unbutton clothing
3) Will unbuckle belt
4) Will snap clothing
5) Will zip clothes
6) Will buckle belt

C) Toileting:

1) Will indicate toilet needs
2) Will complete toileting and wipe self
3) Will display general toileting independence

D) Hygiene and Grooming:

1) Will dry body after bath
2) Will brush and comb hair
3) Will blow nose on verbal command
4) Will keep nose clean with handkerchief

E) Safety

1) Will avoid playing with matches
2) Will avoid playing with or stepping on broken glass
3) Will handle sharp objects properly

BRIGANCE

GROSS MOTOR SKILLS:

1) Will stand on one foot for 10 seconds
2) Will stand on either foot for 10 seconds
3) Will walk backward toe to heel 6 times
4) Will walk upstairs carrying object in one hand without holding rail
5) Will skip on one foot
6) Will jump one jump with jump rope
7) Will walk to stationary playground ball and kick
8) Will walk balance board with hands at side
9) Will bounce playground ball 2 or more times with both hands
10) Will walk to rhythm
11) Will ride and steer wagon with one foot
12) Will ride small bike with training wheels

APPENDIX F

The Contractual IEP

DEVELOPMENT OF THE CONTRACTUAL IEP

Since two IEPs existed for the child-subject, an initial one developed prior to his entry into the preschool program and a second one developed six weeks later to account for the insufficiency of the former, it was necessary to reconcile the two into a composite document which would reflect the individualized education program considered to be in effect for Michael by his teacher, his parents, and the rest of the case conference committee. This was accomplished by reviewing the objectives of the first IEP to assess their relationship to those of the second, in terms of the following conditions:

1. Which were identical to the newer objectives?
2. Which were precursors to the newer objectives?
3. Which were sub-categories of the newer objectives?
4. Which were unique to the first IEP?

Seventeen of the objectives that the teacher felt Michael had already attained were determined to be precursors to skills indicated in the second IEP; these objectives were considered to be superceded by the newer ones and excluded from the contractual plan. Examples of these types of objectives included: "identify and state basic colors," "print with proper pressure on writing instrument," "answer what questions in a grammatically correct sentence." Of the remaining objectives, five were added to already-existent categories of the second IEP, and nine were identified as unique to the first. Since the teacher has not considered any of these nine accomplished at a greater than 80% level, they were added to the contractual plan as a new category, Social Development, and included both socialization and behavior skills. In all, the contractual plan included 87 objectives, derived from a comparative analysis of the two IEPs developed for the child-subject. This process and results were validated by two independent analysts as well as the teacher-subject.

Because the IEPs used different category labels, many objectives overlapped categories from one to another, especially in the areas of Speech and Language, Readiness, General Knowledge and Comprehension, and Reading. For example, "identify colors" in the first IEP, while on the second, "will name colors of orange, purple, brown..." was listed under General Knowledge and Comprehension. Similarly, "tells two events in order of sequence" was a Readiness objective on the first IEP, while "will relate experiences with some understanding of sequence and closure" was a Speech and Language skill in the second. Therefore, a second reconciliation was made, again verified by independent analysts and the teacher-subject, to label categories with titles that reflected both the organization and topical listings in the IEPs as well as the *Thesaurus*. The reconciled, contractual plan is found on the following pages of this Appendix.

The Contractual IEP

Objectives Derived from the Subject's Individual Education Program

1.0 Language/Cognitive Development

1.1 Speech and Language Skills

1.1.1 Will use elaborate or extended sentences.
1.1.2 Will ask questions about persons and things.
1.1.3 Will relate experiences with some understanding of sequence and closure.
1.1.4 Will verbalize about that he has drawn or scribbled.
1.1.5 Expresses future occurrences with "going to," "have to," "want to."
1.1.6 Will learn "long time" and "short time."
1.1.7 Will identify routine events.
1.1.8 Will recall recent past.
1.1.9 Will recall major events in the distant past.
1.1.10 Will know concepts of yesterday, tomorrow, and tomorrow night.

1.2 Cognitive Skills

1.2.1 Will name colors of orange, purple, brown, black, pink, grey, and white.
1.2.2 Will name rectangle and diamond.
1.2.3 Will name body parts of heel, fingernails, elbows, and ankle.
1.2.4 Will give town and street address.
1.2.5 Will understand "stop" and "go."
1.2.6 Will repeat a sequence of 4 numbers.
1.2.7 Will count 5 objects aloud, no assistance.
1.2.8 Will count and point to 6 objects in imitation.
1.2.9 Will match 2 sets of objects.
1.2.10 Will tell which has "more" or "less."
1.2.11 Will discriminate orders by size (biggest, next biggest, smallest).
1.2.12 Will sort (small, medium, and large) by size.
1.2.13 Will group by size.
1.2.14 Group pictures into categories.
1.2.15 Will group objects by function or use.
1.2.16 State opposite analogies (fire is hot - ice is cold)
1.2.17 Demonstrate understanding (through stating, acting, and pointing) of the difference between small and different.
1.2.18 Will paint, and make with clay, recognizable objects.
1.2.19 Will try to read books from memory.
1.2.20 Will tell the name of, or facts about a familiar story.
1.2.21 Will indicate first letter of own name.
1.2.22 Will complete puzzle with 11-15 pieces.

2.0 Social Development: Socialization.

  2.1 Take part in game, pushing car or rolling ball with another child 2-5 mintues.

  2.2 Takes part in manipulative game (pulls string, turns handle) with another person.

  2.3 Play with 2 or 3 peers.

  2.4 Seek out friendships with others.

3.0 Social Development: Behavior.

  3.1 Actively explore environment.

  3.2 Increase attention span at any one task for up to two minutes.

  3.3 Attend to music or stories 5-10 mintues.

  3.4 Carries out series of two unrelated commands.

  3.5 Practice self-control regularly.

4.0 Motor Skills: Fine.

  4.1 Will put paper clip on paper.

  4.2 Will crease paper with fingers.

  4.3 Will draw simple shapes without a model.

  4.4 Will trace letters of name.

  4.5 Will print own name from model.

  4.6 Will draw a person.

5.0 Self-Help Skills.

  5.1 Dressing.

    5.1.1. Will dress unsupervised except for help with difficult fastenings.
    5.1.2 Will zip clothes.
    5.1.3 Will unzip clothing.
    5.1.4 Will unzip separating front zipper.
    5.1.5 Will unbuckle belt.
    5.1.6 Will buckle belt.
    5.1.7 Will snap clothing.
    5.1.8 Will unbutton clothing.
    5.1.9 Will turn socks right side out.

5.2 Feeding.

5.2.1 Will help set own place at table.
5.2.2 Will use knife to cut (with fork).
5.2.3 Will use all eating utensils (spoon, knife, fork, and glass).
5.2.4 Finish completely his meals.
5.2.5 Will clear place at table.

5.3 Hygiene and Grooming.

5.3.1 Will brush and comb hair.
5.3.2 Will keep nose clean with handkerchief.
5.3.3 Will blow nose on verbal command.
5.5.4 Will dry body after bath.

5.4 Toileting.

5.4.1 Will indicate toilet needs.
5.4.2 Will complete toileting and wipe self.
5.4.3 Will completely care for toileting needs.
5.4.4 Will display general toileting independence.

5.5 Safety.

5.5.1 Will handle sharp objects properly.
5.5.2 Will avoid playing with and stepping on broken glass.
5.5.3 Will avoid playing with matches.

6.0 Motor Skills: Gross.

6.1 Will hop.

6.2 Will skip or gallop.

6.3 Will skip on one foot.

6.4 Will jump one jump with jump rope.

6.5 Will stand on either foot for 10 seconds.

6.6 Will stand on one foot for 10 seconds.

6.7 Will walk to rhythm.

6.8 Will walk backward toe to heel 6 times.

6.9 Will walk balance board with hands at side.

6.10 Will walk upstairs carrying object in one hand without holding rail.

6.11 Will catch a large ball.

6.12 Will bouch playground ball 2 or more times with both hands.

6.13 Will walk to stationary playground ball and kick.

6.14 Will ride and steer wagon with one foot.

6.15 Will ride small bike with training wheels.

APPENDIX G

Sample Unitized Transcription of Teacher Interviews

File Name: OPJ428

Subject: Teacher Objectives for 4/28-5/2

Date: 4/28/80

Interviewer: Vicki Pappas

Transcriber: Patty Allison

VCP: We're here with Susan and Sherrie to talk about what objectives they have for Michael for this week.

I: OK. We'll repeat some from last week, and also, we'll add some for this week. I'll still be working with Michael's group. And next week, Sherrie will be working with Michael's group. So, (... I guess I'll do most of the talking today...) OK. We will work on helping Mike M 192 tell a story, just using the pictures. This is a language activity, actually.

VCP: Mm-hm.

I: But also, it involves a lot of reasoning and concept ability. We worked a little bit on it this morning and he did a pretty good job.

VCP: Now you --- could you just give an example of what you might expect as a sign of accomplishing that?

I: OK. Again, it's very teacher-directed activity. I really lead --- the questions are leading questions to the children. We start, we look at the first picture. We C, 193 label who we see in the picture. OK. We go through the pages, and we talk 194 C about the

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story. Well, this is a story they know. OK. So my requirements for Michael, having accomplished this activity, but I think probably it will take a few weeks, would be M 195 if he actually had a book in front of him and he could pretty well tell me the story, flipping through the pages. With probably some cues yet from me. 'Cause Michael still is not --- he's verbal, but it'll be difficult, 'cause he's going to have to use quite a bit of language.

VCP: Mm-hm. So it would be more than just labeling what's happening in one picture. It's M 196 stringing two or three or four together.

I: In a sequence, really is the most important. But we have to begin with making sure that Mike M 197 knows the characters. And also, perhaps a little bit of M 198 what the characters say, not just what happened next. But, try to pick a story that has a lot of repetition. (....). It's hard. It's abstract. The children are all very used to Sherrie or I sitting or feeding information to them. OK. So now, I'm going to give them clues, which would be pictures and cues to give me back what they see. They think a picture is a (....) OK.

We worked a lot on MG 199 tracing our shapes. This, this week, really isn't a necessity any more. OK. I will see how well Mike can M 200 copy a circle and M 201 (copy) a line. M 202 Copy a square. M 203 Copy a triangle. M 204 Copy a rectangle. I think I have a pretty good idea of how---

VCP: Mm-hm. Now, you'll have no dots there, or broken lines?

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I: No. No. Just a white piece of paper with a black shape on it. OK. And no hints from me. Or cues. Except, I will provide a piece of paper and pencil.

VCP: Mm-hm.

MG (identifying) 205

I: We need to work on all the colors in our crayon box. (....) We worked a lot on purple. Most of the kids are really able to identify all eight colors. OK. So now, we'll go a step further and have them match them colors. Play some games with them.

MG 206

VCP: And the matching is, if you show them a purple---

I: A card.

VCP: A card, they'll find one.

I: Or a peg.

VCP: Mm-hm.

MG 207

I: We might get a little bit into generalizing (colors) to other things. I'm not sure Michael's ready for that. Like saying, the sun's yellow, and grass is green.

VCP: Mm-hm. Like, what else in the room might be yellow?

I: Yeah. We might get to that. But... we'll work this week, and we'll continue to work on this throughout the whole rest of the six-weeks of school. Left and right concepts (.....).

MG 208

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APPENDIX H

The Phenomenological Plan

1.0 Broadening his skills of independence--he has to learn to do a job without adult reinforcement. (M, C)

- 1.1 To know what is expected of us as a student in this classroom--things having to do with school; a feel for what school's all about, survival skills to enter kindergarten; to be able to handle a tremendously stimulating environment; how to find their way around the classroom. (M, C)
  - 1.1.1 Knowing how to handle materials--using a greater variety of materials. (M)
    - 1.1.1.1 Working with folders. (MG)
      - $1.1.1.1_1$ Putting a paper in a folder. (MG)
      - $1.1.1.1_2$ Getting a paper. (MG)
      - $1.1.1.1_3$ Closing a folder. (MG)
      - $1.1.1.1_4$ Putting the folder on the floor. (MG)
    - 1.1.1.2 What to do with crayons. (M)
    - 1.1.1.3 What to do with paste. (M)
    - 1.1.1.4 What to do with a pencil. (M)
  - 1.1.2 Doing work independently. (M)
    - 1.1.2.1 To be able to look at a certain thing and decide for yourself how to use it. (C)
      - $1.1.2.1_1$ When work time begins, you're sitting down in a learning center with three other kids and you're on your own. (M)
      - $1.1.2.1_2$ He needs to know when he sits down at a little table with a board and chips and colored water, what he's supposed to be doing. (M)
    - 1.1.2.2 Can he attend to task without a teacher. (M)
      - $1.1.2.2_1$ Completing tasks with decreasing supervision. (M)
    - 1.1.2.3 IA: Working out a problem himself. (M)
  - 1.1.3 How to play appropriately. (C)
    - 1.1.3.1 Initiating play on their own--Sherrie and I were busy and that he must play by himself--independence. (C, M)

$1.1.3.1_1$ Finding a toy--picking an appropriate toy all by yourself, with as little adult intervention as possible, or contact. (C)

$1.1.3.1_2$ Finding something to do when he comes in--coming in, hanging up their coats and getting something to do; then what do we do (after we hang up our coats). (M, C)

1.1.3.2 Playing with something appropriately--how do we play with toys. (C)

$1.1.3.2_1$ Sticking with something (at play). (C)

$1.1.3.2_2$ What do we do with new toys--I have kids in here now that can handle a new toy, ... I didn't even say anything about it; watching how (a new toy) is being played with and hopefully (doing) the same. (C)

$1.1.3.2_3$ Not hitting the wall or throwing dishes at the wall. (C)

$1.1.3.2_4$ Not running around the room. (C)

1.1.3.3 (Putting toys away).

$1.1.3.3_1$ Putting a toy away when you're through with it. (M, C)

$1.1.3.3_2$ Putting a toy away when the time indicates that it's time to stop--listening for directions when it's time to put toys away. (C)

1.1.4 To develop some type of listening skills. (M, C)

1.1.4.1 Coming to Circle listening. (C)

1.1.4.2 Listening in group work. (C)

1.1.4.3 IA: Learning to sit down and listen to a story. (C)

1.1.5 (Run errands).

1.1.5.1 Being able to deliver messages. (O)

1.1.5.1 Being able to go and get the graham crackers. (M)

1.1.6 (Other classroom situations).

1.1.6.1 Being able to make a transition. (C)

$1.1.6.1_1$ To go from a group and be able to find something all by yourself to play with. (C)

$1.1.6.1_2$ Coming back from a mainstream activity by themselves. (O)

1.1.6.2 How to move from one place to another as a group. (M)

$1.1.6.2_1$ How to walk in a group up to the lunch room. (C)

1.1.6.3 IA: Learning to dress himself. (C)

$1.1.6.3_1$ IA: Putting on their coats. (C)

$1.1.6.3_2$ Hanging up your coat all by yourself--what do we do when we come in and we have a coat. Where do we put our coat. (C)

$1.1.6.3_3$ Lacing his shoes. (M)

$1.1.6.3_4$ Buttoning. (M)

$1.1.6.3_5$ IA: Zippering. (C)

1.1.6.4 (Personal care).

$1.1.6.4_1$ Getting a Kleenex. (M)

$1.1.6.4_2$ IA: Brushing teeth. (C)

$1.1.6.4_3$ IA: Combing their hair. (C)

1.1.6.5 How do we use the bathroom--using the toilet. (M, C)

$1.1.6.5_1$ Getting your pants down. (C)

$1.1.6.5_2$ Pulling pants up. (C)

$1.1.6.5_3$ Flushing the toilet. (C)

$1.1.6.5_4$ Remembering the rule that we leave the light on and the door open for other kids. (C)

1.1.6.6 (Bus)

$1.1.6.6_1$ Getting off the bus. (C)

$1.1.6.6_2$ Coming up the steps. (C)

$1.1.6.6_3$ Coming into the room. (C)

1.1.6.7 (Snack time).

$1.1.6.7_1$ Coming to snack without a reminder. (C)

$1.1.6.7_2$ Knowing what to do with food--feeding; self-feeding. (C)

$1.1.6.7_{2.1}$ Eating crackers. (C)

$1.1.6.7_{2.2}$ Drinking juice. (C)

1.1.6.8 Learning to eat in the cafeteria--what behavior is expected in the lunchroom. (M, C)

$1.1.6.8_1$ Take their tray through the line. (C)

$1.1.6.8_2$ Find a seat at the lunchroom table. (C)

$1.1.6.8_3$ Carry their lunch tray back. (C)

$1.1.6.8_4$ Empty their lunch tray--put the silverware in one place, the milk carton in another, and their tray in another place. (C)

2.0 They've got to have those (school readiness) skills--(pre-academics). (C)

2.1 Naming (common objects)--show me the [*object*]; word cue provided.

2.1.1 Working on letters. (MG)

2.1.1.1 Identifying first six letters of the alphabet. (M)

2.1.2 Identifying (naming) *all* of the colors in our crayon box--all the eight colors. (M, MG)

2.1.2.1 Recognizing purple. (M)

2.1.3 (Naming) shapes.

2.1.3.1 Identifying (naming) rectangle. (MG)

2.1.3.2 Identifying (naming) diamond. (MG)

2.1.3.3 Naming triangle. (M)

2.1.3.4 Naming square. (M)

2.1.3.5 Naming "V". (M)

2.1.4 Picking numbers out of a group, not particularly what it represents. (MG)

2.1.4.1 Identifying (naming) numbers one, two, three, four, and five. (MG)

2.1.5 Naming textures. (M)

2.1.6 Knowing very sophisticated body parts. (MG)

2.1.6.1 Knowing fingernails. (MG)

2.1.6.2 Knowing elbows. (MG)

2.1.6.3 Knowing heel. (MG)

2.1.6.4 Knowing ankles. (MG)

2.1.7 Labeling (naming) money. (M)

2.1.7.1 Does he know a penny? (M)

2.1.7.2 Does he know a nickel? (M)

2.1.7.3 Does he know a dime? (M)

2.2 (Knowing personal information)--memory items; no cues (MG)

  2.2.1 Talking about month and day of birthday--him being able to say (his birthday's) in March and the day, March 27th. (M)

  2.2.2 Knowing where they live--knowing address. (MG)

    2.2.2.1 Knowing the name of their street. (MG)

    2.2.2.2 Knowing the town they live in. (MG)

2.3 Counting all by himself (rote). (M)

  2.3.1 Working on numbers. (MG)

    2.3.1.1 Counting to 5. (MG)

    2.3.1.2 Counting to 20. (M)

  2.3.2 Working on counting objects, like buttons, bottlecaps. (M)

2.4 IA: Saying his ABC's to a certain point.

2.5 Fine motor/eye hand activities. (MG)

  2.5.1 (Tracing/copying/writing).

    2.5.1.1 Tracing shapes. (M)

      $2.5.1.1_1$ Tracing triangle. (M)

      $2.5.1.1_2$ Tracing square. (M)

      $2.5.1.1_3$ Tracing "V". (M)

    2.5.1.2 Tracing his name. (M)

      $2.5.1.2_1$ The last two letters. (M)

    2.5.1.3 Copying shapes (from a model). (M)

      $2.5.1.3_1$ Copying triangle. (M)

      $2.5.1.3_2$ Copying square. (M)

      $2.5.1.3_3$ Copying circle. (M)

      $2.5.1.3_4$ Copying a rectangle. (M)

      $2.5.1.3_5$ Copying a line. (M)

    2.5.1.4 Copying his name. (M)

2.5.1.5 Writing his own name (without tracing). (M)

2.5.2 (Using school materials).

2.5.2.1 Cutting out shapes pasted on paper. (MG)

$2.5.2.1_1$ Cutting out triangle. (MG)

$2.5.2.1_2$ Cutting out square. (MG)

$2.5.2.1_3$ Cutting out circle. (MG)

2.5.2.2 Cutting out shapes drawn on a paper. (MG)

$2.5.2.2_1$ Cutting out triangle. (MG)

$2.5.2.2_2$ Cutting out square. (MG)

$2.5.2.2_3$ Cutting out circle. (MG)

2.5.2.3 Putting on and taking off small paper clips. (MG)

2.5.2.4 Working with nails and wood and hammers. (MG)

$2.5.2.4_1$ When the nail is already in the wood, hitting it with a hammer. (MG)

$2.5.2.4_2$ Holding a nail, hit the nail with a hammer without cracking his thumbs. (MG)

2.5.2.5 (Working with clay).

$2.5.2.5_1$ Putting a couple of pieces of clay together. (M)

$2.5.2.5_2$ Making something with clay that his friends and I can recognize. (M)

2.5.2.6 Unscrewing nuts and bolts. (MG)

2.5.3 Doing puzzles. (M)

2.6 (Dealing with) more sorts of abstract kinds of concepts. (M)

2.6.1 (Dealing with) opposite concepts. (MG)

2.6.1.1 More and less. (MG)

2.6.1.2 In and out. (MG)

2.6.1.3 Happy and sad. (MG)

2.6.1.3$_1$ Getting a picture of a happy face and a sad face and saying one is happy and one is sad. (M)

2.6.1.4 Up and down. (MG)

2.6.1.5 Tall and short. (MG)

2.6.1.6 Top and bottom. (MG)

2.6.2 (Dealing with) the concept of pairs. (MG)

2.6.2.1 Finding a pair of cats. (MG)

2.6.2.1$_1$ Finding a pair of cats from about six sets of pairs all spread out and mixed up. (M)

2.6.2.2 A pair of dogs. (MG)

2.6.2.3 A pair of pigs. (MG)

2.6.2.4 A pair of houses. (MG)

2.6.2.5 A pair of chairs. (MG)

2.6.3 (Dealing with) concepts of small, medium, and large. (M)

2.6.3.1 Comparing the biggest with the next biggest with the smallest. (MG)

2.6.3.2 Small, medium, and large using concrete objects. (MG)

2.6.4 (Dealing with) concepts of right and left. (M, MG)

2.6.4.1 Knowing his left hand and right hand. (M)

2.7 (Matching/Sorting)--model provided.

2.7.1 Sorting shapes. (M)

2.7.2 Matching colors in crayon box. (MG)

2.7.2.1 Matching purple--sorting purple. (M)

2.7.2.2 Put three colors in a container, then pick out purple. (M)

2.7.2.3 Finding a color in the room that looks like the color you have. (MG)

2.7.2.4 Generalizing colors to other things, like the sun's yellow and the grass is green. (M)

2.7.3 Grouping (sorting) objects by size. (MG)

2.7.3.1 Small, medium, and large sizes. (MG)

2.7.3.2 (Using) four sizes, making the differences between them a little hard to discern. (MG)

2.7.4 Grouping (sorting) pictures into categories. (M)

2.7.5 Matching textures. (M)

2.8 Playing a game of reason--something like Candyland; where you actually have to reason out your next move. (MG)

2.9 Adding parts to a man (what's missing). (M)

2.10 Having his language skills developed to where they should be for his age. (M)

2.10.1 Expressing some of these more difficult concepts. (M)

2.10.1.1 What do you do when you're sick? (MG)

2.10.1.2 What do you do when your hands are dirty? (MG)

2.10.1.3 What do you do when you go into a room that's dark? (MG)

2.10.2 Making yourself understood. (C)

2.10.2.1 Initiating some language on his own, but with a lot of cues. (M)

2.10.2.2 (Using a loud enough voice). (M)

2.10.2.3 IA: Being able to have a conversation.

2.10.2.4 Answering the phone.

2.10.3 (Storytelling).

2.10.3.1 Talking about the story. (C)

$2.10.3.1_1$ Labeling who we see in the picture. (C)

$2.10.3.1_{1.1}$ Knowing the characters. (M)

$2.10.3.1_2$ What the characters say. (M)

2.10.3.2 Telling a story without props--just using pictures. (M, MG)

$2.10.3.2_1$ Stringing two or three or four pictures together in a sequence. (M)

2.10.3.2$_2$ If he actually had a book in front of him and he could pretty well tell me the story, flipping through the pages, with probably some cues from me. (M)

2.10.4 IA: Maybe even reading. (M)

2.11 Visual perception.

2.11.1 Papers--visual motor; Frostig. (MG)

2.11.2 Left to right progression. (MG)

2.11.3 Same and different. (MG)

2.11.3.1 IA: Looking at pictures and being able to tell us if it's different. (C)

3.0 What it means to get along with each other--teaching children about each other; general socialization; the social interactions and the social behaviors. (C, MG)

- 3.1 To feel good about himself--self-concept, self-esteem. (M)
  - 3.1.1 Initiating things--to do his own thing (beyond the structured setting). (M)
  - 3.1.2 To continue to hold his own in a group of children so he doesn't slip back and become the baby and have people do things to him. (M)
- 3.2 Getting the idea of a group. (C)
  - 3.2.1 We're Desch and Sherrie's class, we're preschool, hooray for us. (C)
  - 3.2.2 Learning how to take turns. (C)
    - 3.2.2.1 Handling the daily disappointments of not getting a turn. (M)
    - 3.2.2.2 IA: Waiting for a toy. (C)
    - 3.2.2.3 IA: Sitting and you can tell him you'll be with him in a minute. (M)
    - 3.2.2.4 Learning to play a group game. (M)
  - 3.2.3 IA: Learning how to work with other children. (C)
  - 3.2.4 IA: Playing with other children. (C)
- 3.3 Caring about each other--their kindness toward each other; the children and their feelings for each other. (C)
  - 3.3.1 Being sensitive to each others' needs. (C)
    - 3.3.1.1 Giving help when help is not asked. (C)
      - $3.3.1.1_1$ If Marsha drops her bottle on the floor, and somebody picking it up. (C)
      - $3.3.1.1_2$ If April's sitting in her chair and her tray's empty of toys, a kid putting a toy in. (C)
    - 3.3.1.2 Learning how to share. (C)
  - 3.3.2 Having respect for each other. (C)
    - 3.3.2.1 What do we do when we want something? (C)
    - 3.3.2.2 How do we approach somebody? (C)

3.3.2.3 How do we talk to a teacher? (C)

3.3.2.4 How do we talk to another child? (C)

3.3.2.5 Saying they're sorry--when they knock somebody down, without (the teacher) constantly being on their case. (C)

4.0 IA: Gross motor skills. (MG)

- 4.1 Working on playground skills. (M)
- 4.2 Learning to play a group game. (M)

APPENDIX I

Conventions for Transcription of Audiotapes and Videotapes

CONVENTIONS FOR TRANSCRIBING

1.) Symbols:

...	a pause; when placed at the end of an utterance, it means that the voice trailed off, leaving an incomplete thought or sentence
---	a break; when placed at the end of an utterance, it means that the speaker cut off or interrupted the thought or utterance
(.....) or (...can I...)	words were unintelligible at this point; when words are included, they are the transcriber's "best guess" of what was said in the phrase or sentence(s)
[ ]	questions or comments made by the researcher
Underline	speaker gave special stress to that which is underlined

2.) Identifying Speakers:

Use three-letter abbreviations followed by a colon to indicate which child is speaking:

Mic: What's for lunch?

For other-than-children, use the following abbreviations:

T: = teacher
IA: = instructional associate
VCP: = researcher
VOL: = volunteer

At times when many are talking, as in a group conversation, it may be necessary to indicate to whom the speaker is talking within a parenthesis:

T: (to IA) We'll need to work on that. (To Mic) Will you get your folder?

3.) Format Conventions:

In typing text, line up the verbatim transcripts as follows:

Mic: Begin what the child said in the 15th space. Continue by lining it up as shown here.

T: Begin what the teacher said in the 15th space. Continue as above...

IA: Begin in the 15th space and continue as above...

Single space within a unit or an event. Insert a double space when there's a change in the event. Start a new line whenever it's necessary to line up verbatim account with a setting description and/or a teacher retrospection.

APPENDIX J

Rules for Unitizing the Videoscript

RULES FOR UNITIZING AGENDAS

An agenda is identified by:

*Something Michael does in the classroom

*Where all parts of the action carry Michael to some particular end (constancy of direction).

*Where there's no faltering or stopping of the unidirectional flow (equal potency).

*Is at a molar level - what Michael might say he was doing if he were asked.

BEGINNINGS:

*Bracket an agenda as beginning every time Michael attends to a person, object, or event in the classroom.

*Cues to determine attending:

- -Looks at
- -Acts
- -Manipulates
- -Reaches for
- -Turns toward
- -New Topic or Song
- -Talks about
- -Listens to
- -Approaches
- -Leans toward
- -Tugs at

*Do not include precursors (these will be "circumstances").

CONTINUATION:

*As long as Michael appears to have the same intent.

*It's a recognizable intent of Michael vis-a-vis a classroom activity or learning situation (personal, social, or academic).

*It's eventually relatable to an objective.

*To decide if one agenda is contained within another, follow the "potency" rule--the whole must have greater weight than any of its parts. If the part has more weight, it is most likely another agenda. If it has the same weight, it shouldn't be an agenda, or the enclosing unit is mis-named or mis-identified.

*In conversations, indicate each shift in topic as a new agenda.

*Different actions are different agendas---e.g., "naming colors" is different from "coloring a pic- ture," although both may occur at the same time.

*If actions occur nearly simultaneously, mark them as one agenda---e.g., reaching for a glass of juice and drinking it.

*If undecided, ask if it's codable as two different objectives or one: Trying to fix vest (self-help); and asking for help (problem-solving). These, then would be unitized as two agendas.

*Enclosing unit should not be redundant to enclosed unit.

*All of Michael's activities/utterances must be in a unit; not necessary for other children, although they probably will be contained in a "circumstance."

*When you're having trouble deciding:

- If person changes, it may be a new unit.
- If verb changes, it may be a new unit.
- If the location changes, it may be a new unit.
- A change in topic/song/fingerplay is a new unit.

ENDINGS:

*An agenda ends when Michael ceases to be engaged in it.

*Cues to determine ending attention:

- Looks away from
- Withdraws from
- Walks away
- Changes to new topic/song
- Leaves
- Ceases acting
- Ceases talking
- Begins new activity
- Puts away

*The "circumstance" may continue, but the agenda stops when Michael does.

*If unit is interrupted, but then is resumed, use this symbol for the bracket:

If unit is interrupted and doesn't resume, use this symbol:

TITLES:

*Use descriptive words to carry forth the nature of the agenda.

*Write the phrase in terms of Michael's behavior.
*Make the first word an "ing" word:
"Claiming a chair"
"Showing teacher a book"
"Getting a cookie"
"Listening to children talk"

*Indicate if Michael was initiator or recipient by using active or passive forms:
"Being helped by teacher"
"Asking teacher for help"

*If agenda continues onto a second page, repeat the title and enclose it in parentheses:
(Asking teacher to help)

RULES FOR UNITIZING CIRCUMSTANCES

A circumstance is identified by:

*The context surrounding one of Michael's agendas.

*Constant in direction; a unidirectional classroom event.

*Is at a molar level---not "free play," but also not "line one of song."

*May be a precursor to an agenda and/or may continue on beyond an agenda.

BEGINNINGS:

*Bracket a circumstance with a dotted line, surrounding the agendas.

*Each time you have an agenda, check to see if you can identify a circumstance.

*Mark only those circumstances related to Michael's agendas.

*Michael can start a circumstance; it can be identi- cal in duration to an agenda.

*If you can identify the precursor portion, do so. If not, start the circumstance where Michael is involved.

CONTINUATION:

*In the same psychological direction.

*Until it stops in and of itself (e.g., teacher calls an end to Snack) or if Michael's new agenda creates a new circumstance (e.g., going to the toy table to find a new toy).

*Since circumstances are to be related to what is happening to Michael, they may continue in the classroom but should not be marked as continuing to affect Michael.

ENDINGS:

*If it ends in and of itself, indicate with a bracket:

*If it continues beyond Michael's newest agenda, mark it as break:

*Cues to determine endings:
- a person walks away
- a change in topic/song
- a new activity begins
- a teacher announces a new event/activity.

TITLES: *Write in capitals.

*Use a noun phrase:

"TEACHER PRESENTATION OF PLAY MATERIALS"
"ARRIVAL OF GYM TEACHER"
"CALL FOR SNACK TIME"
"GOOD MORNING SONG"
"ANIMALS ON PLAY TABLE"

*If a circumstance continues onto a second page, repeat the title and enclose it in parentheses.

(DISTRIBUTION OF JUICE)

APPENDIX K

Sample Unitized Videoscript

SAMPLE
VIDEOSCRIPT
PAGE

--- CLOTHESPINS ON TABLE --- | -- HAPPY SONG -- | -- (TRANSITION) ---

(Watching others)
Singing Happy Song
(344)
Finding seat
(345)
Wanting to be teacher
(346)
Unclipping caps from clothespins
(347)
Telling T he broke clip
(348)

VIDEO DATE: Day 2

PAGE: 31

VIDEOTAPE TRANSCRIPT	SETTING DESCRIPTION	TEACHER RETROSPECTION
Mic: After lunch? Den: (.....) T: Uh, that's alright, we're almost through. She can play. OK. Here we go.		
We have had a happy time,	Mic: (...have...happy time) Children all clap in rhythm; Mic holds his foot.	
Happy time, happy time.	Mic: (happy time...)	
We have had a happy time,	Mic: (We have had...happy time)	
In our Circle today.	Mic: (In our Circle...)	
T: We had a good Circle.	Mic stands and raises his hands.	
Mic: Yah!		IA: He didn't get too excited.
T: OK. Desch's kids, go to our table.	Mic and the other three children go to their group table where there are cans waiting. Mic takes one and looks inside.	
Mic: Sondra, I want to be teacher.	Mic goes over to Son's chair, then looks in T's materials box for the group.	VCP: How did you hope that putting these all on the table like that, did you *intend* that they would start manipulating them?
I'm going to be teacher, guys. (...I'm going to...here...). I want be teacher. Kids---	Mic moves materials over by his chair. Mic sits down and begins taking out clothespins and bottlecaps from can.	T: Yeah. I wanted them to sit down and get started without the falderal that was going on before. But, some of it's still going on! (laughs) Because I knew with Sher and me *there*, there was a lot that I had to do, you know. Not to help Sher get ready, but with kids that weren't being (.....).
Hey Desch, I want to be teacher. T: Put them down, please, and put them back together. April needs my help (.....).	T has come to table.	VCP: Um-hm.
Son: I can't.	T leaves to help Apr.	T: And also it teaches the kids to initiate some things on their own. To get some help from the materials, really. And they---you know, they need to do that.
T: Yes you can. You *try*.	All four children begin to detach bottlecaps from clothespins. A clothespin has broken.	T: What was it, clothespins? IA: I don't know. VCP: Yeah. Clothespins and caps, I think.
Mic: Hey Desch, I broke it. T: That's alright. We'll get it fixed. Son: That broke (...it...) too, Desch.	Mic tries to open a clothespin by using his teeth. He keeps it there.	IA: Yeah. T: Actually, it *was*. Yeah. And, of course, it *had* to be something they knew how to do.

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VIDEO DATE: Day 2 PAGE: 32

ARRIVAL OF T's MATERIALS ---|--- (CLOTHESPINS ON TABLE) (369) (Unclipping)

Watching T bring materials to table (371)

(370) Clipping clothespins onto cans

Dumps Son's clothespins into his can

VIDEOTAPE TRANSCRIPT	SETTING DESCRIPTION	TEACHER RETROSPECTION
T: Not in your mouths, guys. Please. Come on, Jeff. I'll be there in a second.		
Mic: (Desch...I want [illegible]	Son has finished and moves her can away. Mic takes Son's can and empties it into his.	
T: Put your clot[illegible] can.	Mic has knocked over Son's empty can.	
Mic: Uh-uh. T: I asked you to [illegible]. (to Jef) I didn't ask you to do that, did I? I said put your clothespins on your can. Jef: I just did it.		
Mic: What's in there, please...(on the...)	Mic rummages through his can for clothespins and works to attach them to the tim of the can.	VCP: So what you would have liked to have seen was Mic here, was that he would have sat down played a little bit, but then ended up puttin clothespins around the rim of the can, withou having to--- T: Without being told. Yes.
T: Sondra, I believe these are my things here. Son: Those aren't mine.	Son has just put her can into the T's materials box. T gives it back to her. T puts the broken clothespins in Son's can.	VCP: Jef has got some started, now. T: Yeah.
Mic: That's mine! Son: Can you fix it? Mic: No, Desch will. I broke it. Son: (....Thanks, Michael...)		
T: Oh, Denise, that's so nice what you're doing. Mic: I want a wuh--- T: Sondra? Son: I (...fixed...) it again. T: You did. OK. Jeff's is ready to go. Denise is ready to go. Den: Oh, Mike!	T comes back to table and sits.	VCP: So what, now this is really a fine motor skill? T: Yeah. VCP: But what you're using it for, though, is gaining independence, working on your own? T: Yes.
T: How come you have Sondra's? Mic: 'Cause.	T gives Son back some clothespins from Mic's can.	T: He'd dumped Son's in his can! (laughs)
T: Well, you shouldn't have. Come on, Sondra, get them on there. Boy, we're going to have fun today! We're going to work with some hammers and nails. Den: (...Amy, Amy...) T: Oh, are we going to have fun.	T is getting folders out. Mic finishes and walks over to the box where she's getting them from.	

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- - - T DIRECTIONS ON RIGHT & LEFT - - - - | - - - T INSTRUCTIONS - - - - - -
(373) Recognizing right and left | (372) Waiting | (Watching T)
(374) Watching/Waiting to get string tied on

VIDEO DATE: Day 2

PAGE: 11

VIDEOTAPE TRANSCRIPT	SETTING DESCRIPTION	TEACHER RETROSPECTION
Jef: (...get it...)		
T: We're going to talk about three pigs. Michael, have a seat please.		
Mic: Yes, Daddy!	Mic sits again.	
Jef: (...with that?)		
T: Well, you'll see.	T collects cans.	
Mic: Yes, Daddy.		
T: OK, but before we do that---		
Mic: Yes, Dad.		
T: (to Jef) We'll (...put for a side...)	T pushes in Jef's chair.	
Jef: These (...our...) pencils?	Jef refers to pieces of string T has out.	
T: Nanette, how about if you give Cindy the little chair and you take the big chair. That might be better.	T gives instructions to volunteer.	
Son: Aw!	Mic has one of Son's clothespins. She takes it from him. Mic watches Nan.	T: Ok, what I should have done there is comment on what they did. I sure didn't do that. Because they all did a good job. Plus the fact that you could talk about it in terms of what you do first and then (.....)
T: (to Son) OK, what about this one, babe? Is that hard to do, 'cause it's broken? Alright. Let's talk about right and left and let's have your eyes up here.	T gives Son a clothespin.	
Everybody hold up you right hand. OK.	Mic raises his right hand.	
Jeff, that's you left hand. Good. OK. Denise, that's good!	Mic changes to his left hand as Jef changes to correct his. (Jef is sitting opposite Mic.)	IA: (.....) Mic's the only one right.
Sondra, that's your left hand.	Mic puts his hand down.	
OK. I'm gonna tie a string on your right hand.	T ties a string on Jef's right hand.	
Most of you use your right hand to do papers. This will help you remember. We'll take it off half through. OK.	Mic raises his right hand again.	
Mic: I want a string on.		
Jef: (noises)		
T: Denise, you want to hand me your right hand?	Mic raises his right hand again.	
Jef: (noises) (...right hand...)		
Den: Where's Sondra?		
T: Sondra sometimes uses her left hand. We'll put a string on her right hand.		
Good, Sondra!	Son put out her right hand.	
T: Jeff.	Jef has continued to make noises.	
Jef: (.....) one.		
T: OK. Who's it for?	Jef has the last string in his hand.	
Jef: Me.		
T: Oh, you have one.		

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APPENDIX L

Rules for Matching Agendas to Objectives

RULES FOR MATCHING AGENDAS TO IEP OBJECTIVES

General Rules

1. There are three possible codes to give to each agenda:

   a. Its match to a contractual IEP objective.
   b. Its match to a phenomenological IEP objective.
   c. It is a non-match to objectives on either of those IEPs.

2. For each agenda, indicate the number of the objective it matches on the contractual and/or the phenomenological plan under the appropriate column(s). If it doesn't match any objective, put an "X" in the non- match column.

3. Code your agendas independently. Then come together to check agreement. For those you disagree on, try to reconcile the differences. Refer to the transcript and/or the videotape. Document your reasons for coming to a decision. Bring agendas you are unsure about to me.

4. Code things that Michael may do incorrectly as an example of a particular objective being attempted as well as things he is doing. E.g., he counts five objects incorrectly; code this as "counting to five" as he is working on that skill.

5. In general, if you match an agenda to objectives in both plans, the ob- jectives will be in similar categories.

6. Don't use the Gross Motor objectives.

7. Use of name/identify

   a. If Michael is given a cue (e.g., "Where is the red crayon?"), code the agenda as a labeling objectives.

   b. If Michael has no cue (e.g., "What color is this?"), code the agenda as a non-match/extension.

8. Use of sort/group/matching

   a. If Michael is given a model set to group things into, code the agenda as a sorting/matching objectives.

   b. If Michael has to form his own categories without a model, code the agenda as non-match/extension.

9. Poems, finger plays, and songs.

   a. Good Morning Song and closing song: code as sense of group, teacher intent only (3.2.1)

   b. Some have inherent learnings; code appropriately (e.g., Clapping Song works on understanding directional terms; Old Woman and Miss Muffett poems work on language and rhymes).

c. Some songs deal with role-playing and pretending (If You're Happy/Sad and You Know It); code as non-match.

Specific Rules for Contractual Plan Objectives

1. Speech and Language objectives (1.1) do not include conversations, unless the conversation illustrates the specific grammatical skill being worked on or the topic.

   1.1.1 Code when responds to a teacher-initiated question, when teacher is trying to get him to talk; don't use this for interactive conversations.

   1.1.2 Code when Michael initiates the questions.

   1.1.8 Code when Michael discusses past activities, not learnings.

2. Under Preacademic (1.2), be careful of naming, matching and sorting (See # 7 and # 8 above).

   1.2.7 Code when counting up to 5.

3. Under Socialization (2.0), many agendas will illustrate examples of Michael learning how to do these things. Code them as examples of the skill.

   2.3 Include role-play with another child.

   2.4 Code if interacting with another; also when spontaneously greets someone; a greeting does not have a corresponding teacher intent.

4. Under Behavior (3.0)

   3.1 Code only when Michael explores things without teacher intervention; being curious.

   3.4 Code when an explicit command by teacher; not following directions.

   3.5 Occurs during transitions; do not code when Michael is taking turns.

5. Under Self-Help (5.0), folding and tying agendas should be coded as non-matches.

Specific Rules for Teacher Intent

1. Under Playing Appropriately (1.1.3)

   1.1.3.1 Code when Michael plays by himself independently.

   1.1.3.2 Code when he's at free play, not in a structured situation.

   1.1.3.3 Include also putting materials away.

1.3.3.1 Code when Michael initiates.

1.3.3.2 Code when the situation/teacher initiates.

2. Under Listening Skills (1.1.4), code when Michael is attending to directions or teacher; not for when he's listening and watching children or events. He needs to be listening to receive direct instruction or to follow directions in this category; listening and watching as a general activity should be coded as a non-match.

3. Under Run Errands (1.1.5)

   1.1.5.1 Code if gets items other than graham crackers as well.

4. Under School Readiness (2.0)

   2.1 Code if names objects (with a cue); code naming children, animals, etc. as a non-match/extension.

   2.1.2 Includes the basic eight colors.

   2.3 Code if he counts by rote.

   2.3.2 Code if he counts things; matches with contractual objectives 1.2.7 or 1.2.8.

5. Under Language (2.10)

   2.10.2 Usually refers to conversations.

   2.10.2.1 Similar to contractual 1.1.1.; responding to a teacher question.

   2.10.2.3 Code if the conversation is extended; there is no contractual plan match for this.

6. Under Storytelling (2.10.3)

   2.10.3.1 This does not include merely naming animals or objects in pictures.

7. Under Socialization (3.0)

   3.1 Code as self-concept if he receives praise.

   3.1.1 Has to be related to self-concept, not other initiations (e.g., bringing folder to show visiting teacher his work).

   3.2.2.2 Can also be coded when he's waiting for a turn.

   3.3.2 Code when says please, thank you (manners).

   3.3.2.1 Code when he asks for a turn, or for help, but not when he asks for more; can also code "grabbing" here (skill not yet achieved).

Agendas to Code as Non-Matches

1. Anything on pre-reading.
2. Anything on pretending; including pretending songs and poems.
3. Use of props, such as foam blocks, sock puppets; but not materials such as scissors, paste.
4. Any cleaning-up activity; e.g., after snack or teacher-directed.
5. Safety.
6. Seeking attention.
7. Eating M & Ms, when used as a re-enforcement.
8. Listening to a conversation.
9. Carrying out a direction.
10. Wanting more of anything.
11. When people do things for him (e.g., unbuckling his overalls) as a facilitating action.
12. Scooping, folding, or tying agendas.
13. Any extensions of specifically-named objectives.

VITA

Victoria C. Pappas was born in Lockport, New York on April 4, 1941. In 1963, she entered State University College at Geneseo, New York, and was awarded a Bachelor of Science degree in elementary education from that institution in 1963. After teaching first grade in a suburban Buffalo, New York public school for five years, she became an instructor at the Campus School at State University College at Buffalo, where she was a part of a teaching team which developed the Primary Unit, a non-graded continuous progress primary program, and a concommitant preservice teacher education program for elementary and special education majors. In 1972, she received a Master of Science degree in elementary education from the College.

Two years later, she began doctoral work at Indiana University, in the Interdisciplinary Doctoral Program on Young Children (IDPYC). Her academic interests included child development, teacher education, professional ethics, and social policy regarding young children and special populations. She served as a graduate assistant, and later as an interdisciplinary intern, at the Indiana University Developmental Training Center, where her work experience included the development of training materials and workshops in the areas of deinstitutionalization, consumer advocacy, individual plans, and interdisciplinary teaming. She also was involved in the provision of technical assistance for state level planning and policy development regarding developmental disabilities and personnel development.

Presently, Ms. Pappas is a Research Associate at the Developmental Training Center, where she serves as Project Coordinator of the Indiana Comprehensive System of Personnel Development Project. She has additional responsibilities in the provision of field inservice training, in the coordination and instruction for the Center's Interdisciplinary Seminar, in research and faculty development, and in state planning and evaluation.